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ICHTHYOPLANKTON AND STATION DATA FOR OBLIQUE (BONGO NET) PLANKTON TOWS TAKEN DURING A SURVEY OF SHALLOW COASTAL WATERS OF THE SOUTHERN CALIFORNIA BIGHT IN 2004 AND 2005

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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Southwest Fisheries Science Center

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ABSTRACT

NOAA Southwest Fisheries Science Center, working with the City of Los Angeles Department of Public Works, conducted a survey of fish eggs and larvae in the nearshore zone of the Southern California Bight during 2004–2005. Oblique bongo net tows through the water column were made at each of five depth intervals between the 8- and 75-m isobaths at each of four sites between Ormond Beach and San Onofre, California, during six quarterly surveys from January 2004 to July 2005. The 120 samples yielded 41 categories of fish eggs and 72 categories of fish larvae; the five most abundant taxa accounted for about 94% of the total standardized fish egg abundance and about 88% of the total standardized larval fish abundance. Northern anchovy, *Engraulis mordax*, was the overwhelmingly dominant species, accounting for 76.1% of the total fish eggs and 70.9% of the total fish larvae.

This report provides ichthyoplankton data and associated station and tow data from the 2004–2005 nearshore survey. The data are listed in a series of nine tables; the background, methodology, and information necessary for interpretation of the data are presented in an accompanying text. All pertinent station and tow data, including volumes of water strained and standard haul factors, are listed in the first table. Other tables list, by station and month, standardized counts (number under 10 square meters of sea surface) of each of the fish egg and larva categories identified in the plankton net tows. This report makes the ichthyoplankton and station data available to all investigators and serves as a guide to the electronic data base.

INTRODUCTION

The nearshore zone is heavily fished by recreational fishers, and since the mid-1980's by a live-fish commercial fishery, and it is the coastal zone that is most affected by urbanization. Harvesting of nearshore fish stocks already may have depleted some and could reduce others to dangerously low levels (e.g., Pattison and Vejar 2000; Walters 2001). Many of these species need immediate fishery management attention and are now included in the California Nearshore Fishery Management Plan <<http://www.dfg.ca.gov/MRD/nfmp/entire.html>>.

Management of fish stocks requires information on population size and among the most valuable sources of information are fishery-independent indices of abundance. Ichthyoplankton surveys can provide fishery-independent measures of population trends and have been shown to be useful tools for estimating population sizes (e.g., Lasker 1985; Moser and Watson 1990). The most useful indices for management purposes are long-term time series such as the California Cooperative Oceanic Fisheries Investigations (CalCOFI) ichthyoplankton time series. However, the CalCOFI survey design has an offshore bias and eggs and larvae of nearshore species tend to be substantially undersampled although, perhaps surprisingly, abundance trends of the larvae in CalCOFI collections have been shown to track adult abundance trends reasonably well for some nearshore species (e.g., Moser and Watson 1990; Moser et al. 2001). Nevertheless, inshore surveys designed specifically to sample shorefish eggs and larvae, most of which occur predominantly, or in some cases exclusively, within the nearshore zone (e.g., Gruber et al. 1982; Barnett et al. 1984; McGowen 1993), should provide more robust estimates of their abundances than the CalCOFI surveys.

Such nearshore surveys were conducted in the Southern California Bight during the late 1970's–mid-1980's (Barnett et al. 1984; McGowen 1993; Moser et al. 2001). The most spatially extensive of these was the Ichthyoplankton Coastal and Harbor Surveys (ICHS) which sampled along several inshore survey lines from Point Conception to San Diego (Brewer and Smith 1982; Lavenberg et al. 1986). Two of these lines, Playa del Rey and Seal Beach, were occupied throughout the mid-1978–1985 time series and two others, Ormond Beach and San Onofre, were occupied from mid-1979 through 1985.

During 2004–2005 Southwest Fisheries Science Center (SWFSC), working with the City of Los Angeles Department of Public Works (DPW), resumed sampling along the ICHS survey lines at Ormond Beach, Playa del Rey, Seal Beach, and San Onofre (Figure 1), taking standard CalCOFI-type oblique plankton tows similar to the bongo-net sampling conducted during the ICHS surveys. In this report we provide the ichthyoplankton and associated tow and station data from the six cruises that constituted the 2004–2005 nearshore plankton survey.

METHODS

Sampling Area and Pattern

The survey consisted of six cruises at approximately quarterly intervals between January 2004 and July 2005, intended to coincide with the quarterly CalCOFI cruises (Watson et al. 2005; Ambrose et al. 2006). Four sites were sampled in the Southern California Bight during each cruise (Figure 1): Ormond Beach (approximately 34° 07' N, 119° 16' W), Playa del Rey (approximately 33° 57' N, 118° 27' W), Seal Beach (approximately 33° 42' N, 118° 04' W), and San Onofre (approximately 33° 21' N, 117° 34' W). Samples were collected along the 8-, 15-, 22-, 36-, and 75-m isobaths at each site, following the ICHS survey design.

Sampling Gear and Methods

Plankton tows were made with a standard 71-cm CalCOFI bongo net (McGowen and Brown 1966; Smith and Richardson 1977). The Bongo frame consists of a pair of circular frames connected to a central axle. The axle is free to rotate so that the mouth openings are vertical during the tow. The standard CalCOFI net has 71 cm diameter frames and net material constructed of nylon mesh. Each net consists of a cylindrical section ~ 146 cm long, a truncated conical section ~ 161 cm long, and a detachable cod end. The nets are constructed of 0.505 mm mesh and the cod ends are constructed of 0.333 mm mesh.

The bongo net was clamped to the towing cable about 1 m above a 34 kg weight and fished astern. The tow was a double oblique haul to 1–2 m above the bottom. Hauls were made at a ship speed of 1.5–2.0 knots. The net was lowered to depth by paying out wire at a nominal rate of 20 m/minute. After fishing at depth for 10 seconds, the net was retrieved at 20 m/minute. The angle of stray was recorded every 30 seconds and maintained at 45° (\pm 7°) by adjusting ship speed and course. After reaching the surface, the nets were washed down and the sample from the starboard net was preserved in sodium borate-buffered 5% formalin, while the sample from the port net was preserved in tris-buffered 95% ethanol. About 24 hours after initial preservation, the ethanol was changed in each sample from the port net. At the beginning and end of each tow, readings were made from a flowmeter suspended in the mouth of the starboard net. A Lotek time-depth recorder mounted on the bongo frame recorded sampling depth and temperature profiles. In addition, surface water temperature was measured with a bucket thermometer and weather and sea state observations were recorded at each station. Sampling was conducted by the DPW Bureau of Sanitation Environmental Monitoring Division, aboard their research vessel *La Mer*. All sampling was completed during daylight hours (generally between 0800–1500 PST).

Laboratory Procedures

In the laboratory at SWFSC zooplankton displacement volume was determined for each starboard net sample (methods described in Staff, SPFI 1953 and Kramer et al. 1972). These samples were then sorted entirely, with the ichthyoplankton removed from the invertebrate portion of each and bottled separately in 3% buffered formalin. The sorting process included the removal of all ichthyoplankton from the samples and identification and separation of eggs and larvae of Pacific sardine *Sardinops sagax*, northern anchovy *Engraulis mordax*, and larvae of Pacific hake *Merluccius productus*. Body lengths of

these larvae were measured to the nearest 0.5 mm. The ethanol-preserved plankton samples were not sorted, but have been archived for analysis at a later date. The volume of water filtered by each net was computed from the flowmeter readings.

A standard haul factor (SHF) was calculated for each net tow to make them comparable and to determine the total number of individuals of each taxon under a unit surface area (Kramer et al. 1972; Smith and Richardson 1977; Moser et al. 1993). The SHF is calculated by the formula:

$$\text{SHF} = \frac{10 D}{V}$$

where D = depth of haul = cosine of the average angle of stray of the towing cable multiplied by cable length (m), and V = total volume of water (m^3) strained during the haul:

$$V = R \cdot a \cdot p$$

where R = total number of revolutions of the current meter during the haul, a = area (m^2) of the mouth of the net, and p = length of the column of water needed produce one revolution of the current meter.

Station data, tow depth, volume of water strained, and standard haul factor are listed in Table 1 for each tow taken during the survey. Detailed descriptions of factors involved in calculating these values are presented in Ahlstrom (1948), Kramer et al. (1972), and Smith and Richardson (1977).

Identification

Early ontogenetic stages of fishes are inherently difficult to identify and this is further complicated by the large number and diversity of species which contribute to the ichthyoplankton of the California Current region. Nevertheless, more than 99% of the fish eggs and larvae could be identified to some taxonomic category; most were identifiable to species. The following taxonomic categories warrant some explanation:

Fish Eggs

Ophidiidae – eggs that closely resemble *Ophidion scrippsae*, but are slightly larger; it is possible that these are *O. scrippsae*.

Perciformes – eggs of *Atractoscion nobilis* and *Sphyraena argentea* have broadly overlapping ranges of chorion and oil globule diameters; older embryos have diagnostic pigmentation, and yolk segmentation, when visible, distinguishes *S. argentea* at all stages; these are early stage eggs of *A. nobilis* and/or *S. argentea* in which presence/absence of yolk segmentation could not be determined.

Paralichthys californicus/Hypsopsetta guttulata – eggs of these species have broadly overlapping ranges of chorion and oil globule diameters; older embryos have diagnostic pigmentation and both older eggs and larvae of *P. californicus* were far more common than those of *H. guttulata*; nevertheless, it is possible that some early stage eggs of *H. guttulata* were included with *P. californicus*.

Sciaenidae – unidentified sciaenid eggs; most have characteristics consistent with *Seriphis politus* but some other species, primarily *Roncador stearnsii* and *Umbrina roncador*, cannot be unequivocally excluded.

Fish Larvae

Gibbonsia spp. – small larvae that have not yet developed diagnostic meristic characters; morphology and pigmentation are consistent with larvae from other collections tentatively identified as *G. elegans*.

Hypsoblennius spp. – small or damaged larvae lacking diagnostic characters; the majority are likely to be *H. jenkinsi* but *H. gentilis* and *H. gilberti* might be included as well.

Nannobrachium spp. – two *Nannobrachium* species, *N. ritteri* and *N. regale*, occur commonly in the vicinity of the survey area; the category *N.* spp. contains small or damaged larvae lacking diagnostic pigment patterns, most (or all) of which probably are *N. ritteri*.

Paralabrax spp. – larvae of the *Paralabrax* species in the study area cannot be reliably identified to species using standard morphometric and pigmentation characters; this category may include both *P. clathratus* and *P. nebulifer*.

RESULTS

In total, 120 successful bongo net tows were made during the survey. The formalin-preserved samples yielded 41 categories of fish eggs: 33 species (97.5% of the total standardized egg abundance), 2 genera (< 0.1%), 2 families (1.5%), 2 orders (0.3%), plus “unidentified” (0.6%) and “disintegrated” eggs (<0.1%) (Tables 2, 3). Fish larvae were identified in 72 categories: 63 species (92.3% of the total standardized abundance), 7 genera (7.7%), 1 family (<0.1%), and “disintegrated” larvae (<0.1%) (Tables 4, 5).

Fish Eggs

The ten most abundant categories accounted for 97.5% of the total fish egg abundance; 94.2% was contributed by five taxa (Table 3). Among the ten most abundant categories, five are shorefishes, three are more broadly distributed coastal fishes, one is a mesopelagic species, and one is a composite of unidentified species.

The most abundant taxon was the coastal pelagic species, northern anchovy, which accounted for 76.1% of the total standardized egg abundance. Northern anchovy eggs occurred in all months, but ranked only third in frequency of occurrence, with eggs taken in 65.8% of the samples. For comparison, within the larger (and mostly more offshore) southern California portion of the CalCOFI survey pattern, northern anchovy eggs occurred at 20% of the stations and accounted for 54.6% of the total fish eggs collected in 2004 and 2005.

Eggs of the demersal shorefish speckled sanddab, *Citharichthys stigmaeus*, were the second most abundant and were the most frequently collected during the nearshore survey, occurring in all months, in 85.8% of the samples, and accounting for 7.7% of the total fish egg abundance. For comparison, during 2004–2005 speckled sanddab eggs occurred in 14.4% of the CalCOFI samples off southern California, where they contributed 1.0% of the total fish egg abundance. The third most abundant and fourth most frequently occurring fish eggs during the nearshore survey were the schooling epibenthic shorefish white croaker, *Genyonemus lineatus*, which spawns primarily in winter and spring. White croaker eggs were collected on all nearshore survey cruises except during June–July, occurring in 64.2% of all samples and accounting for 5.9% of the total fish egg abundance. These eggs were taken in 11.9% of the CalCOFI

samples and contributed 1.8% of the total fish egg abundance off southern California during 2004–2005. Eggs of the demersal shorefish California halibut, *Paralichthys californicus*, were fourth most abundant but second most frequently collected in the nearshore survey, accounting for 3.1% of the total fish egg abundance and occurring during all months in 75.8% of the samples. California halibut eggs accounted for 2.3% of total fish egg abundance and occurred in 20.1% of the CalCOFI samples collected off southern California in 2004–2005. The fifth most abundant fish eggs near shore were unidentified eggs of the shorefish family Sciaenidae (probably predominantly queenfish, *Seriphis politus*), which accounted for 1.4% of the total fish egg abundance. These eggs were collected in 27.5% of the samples, all during April–October cruises, ranking ninth in frequency of occurrence. At CalCOFI stations off southern California unidentified croaker eggs accounted for 0.3% of the total fish egg abundance and were taken in 1.4% of the samples during 2004–2005.

Perhaps somewhat surprisingly, eggs of the mesopelagic California smoothtongue, *Bathylagus stilbius*, were sixth most abundant near shore, where they accounted for 1% of the total fish egg abundance, but they were relatively uncommon, tying with four other taxa for 17th most frequently occurring (8.3% of samples). Given the adult habitat it is not surprising that California smoothtongue was more common in the 2004–2005 CalCOFI surveys, accounting for 5.6% of the total eggs and occurring in 23.4% of the southern California samples. The remaining four of the ten most abundant fish egg categories near shore were, in order of abundance: señorita, *Oxyjulis californica* (0.7% of the total), a reef- and kelp forest-associated shorefish, unidentified fish eggs (0.6%), Pacific sardine (0.5%), a coastal pelagic species, and English sole, *Parophrys vetulus* (0.4%), a coastal demersal species. These ranked 12th (14.2% positive samples), 6th (45.8%), 11th (17.5%), and 10th (20.0%), respectively, in frequency of occurrence. The other 31 taxa together accounted for 2.5% of the total fish egg abundance near shore.

Fish Larvae

The ten most abundant taxa accounted for 94.3% of the total larval fish abundance and the five most abundant were 87.8% of the total (Table 5). Seven of the ten are planktonic spawners, two (*Hypsoblennius jenkinsi*, *Lepidogobius lepidus*) are demersal spawners, and one (*Sebastes* spp.) is viviparous.

As with the fish eggs, northern anchovy were by far the most abundant larvae, accounting for 70.9% of the total larval fish abundance. They also were the most common larvae, occurring during all cruises in 50% of the nearshore samples. In the larger CalCOFI area, northern anchovy occurred at 26.4% of the southern California stations in 2004–2005, accounting for 43.7% of all fish larvae collected. Unidentified larvae of the rockfish genus *Sebastes*, a coastal, largely demersal taxon, were an order of magnitude less abundant than northern anchovy, but still were the second most abundant taxon in the nearshore survey, occurring in 25% of the samples, primarily during winter and spring, and contributing 7.3% of the total fish larvae. Frequency of occurrence was a little higher but proportional abundance a little lower in CalCOFI collections off southern California during 2004–2005: larval *Sebastes* occurred in 29.9% of the CalCOFI bongo samples and accounted for 5.5% of the total larvae. Larvae of a mesopelagic species, northern lampfish *Stenobrachius leucopsarus*, were the third most abundant and fifth most frequently occurring taxon in the nearshore survey where they were taken in 20.8% of the samples, almost entirely during winter and spring, and contributed 3.8% of the total larval fish abundance. In the larger CalCOFI area a slightly smaller proportion, 2.9%, of the fish larvae were northern lampfish, and they occurred only a little more frequently than near shore, in 28% of the CalCOFI bongo samples.

White croaker was the fourth most abundant and second most frequently occurring larval fish taxon near shore, with 3.7% of the total larvae and occurring in 32.5% of the samples, primarily during

winter and spring. These larvae were much rarer in CalCOFI collections off southern California during 2004–2005: they occurred in 4.3% of the bongo samples and accounted for only 0.3% of the total larvae. Larval California halibut were taken in 25% of the nearshore samples, where they ranked fifth in abundance, accounting for 2.1% of the total fish larvae. Larvae were taken throughout the year, but primarily in winter and spring. Like white croaker, larval California halibut were much rarer in CalCOFI collections off southern California, occurring in only 3.7% of the bongo samples and accounting for 0.1% of the total larval fish abundance during 2004–2005.

Pacific hake ranked sixth in both frequency of occurrence and abundance near shore. It was taken in 14.2% of the samples, all during December–April, and accounted for 2% of the total fish larvae. Larval Pacific hake were slightly more common in the southern California portion of the CalCOFI area during 2004–2005, occurring in 17.6% of the samples and contributing 3.9% of the total larval fish abundance. The remaining four of the ten most abundant larval fish taxa in the nearshore survey were rarer in the 2004–2005 CalCOFI samples off southern California than in the nearshore survey samples. English sole, the seventh most abundant taxon, contributed 1.7% of the total larval fish abundance near shore and occurred in 7.5% of the samples, nearly all in winter and spring. During the 2004–2005 CalCOFI surveys it occurred in only 1.2% of the samples off southern California, where it accounted for less than 0.1% of the total larval fish abundance. Another coastal demersal species, slender sole *Lyopsetta exilis*, like English sole occurred in 7.5% of the nearshore survey samples, but only in April, and it accounted for 1.3% of the total abundance. It occurred in 4.3% of the 2004–2005 CalCOFI samples off southern California, but accounted for only 0.1% of the total larval abundance. The demersal shorefish, bay goby *Lepidogobius lepidus*, was ninth most abundant near shore, accounting for 1% of the total larvae and occurring in 9.2% of the samples. It was barely represented in the 2004–2005 CalCOFI collections off southern California, occurring in 1.1% of the samples and contributing much less than 0.1% of the total larval fish abundance. The tenth most abundant taxon near shore, another demersal shorefish, mussel blenny *Hypsoblennius jenkinsi*, like bay goby occurred in 9.2% of the samples, but it accounted for only 0.5% of the total larval fish abundance. Larval mussel blenny were not as rare as bay goby in CalCOFI samples, occurring in 5% of the samples off southern California where they accounted for 0.2% of the total larval fish abundance during 2004–2005. The other 62 larval fish categories identified during the nearshore survey together contributed 5.7% of the total larval fish abundance.

Compared with results of the ICHS study, which occupied the same stations roughly 20 years earlier, larvae of seven of the ten most abundant families in the earlier study (McGowen 1993) remain among the most abundant currently although the rank order of abundance has changed for all except the dominant taxon in both studies, northern anchovy. Three families ranked among the ten most abundant in the 1980's (Clupeidae, Scombridae, Atherinopsidae) were not among the top ten during the current survey. All three families have a generally warm-water affinity, and the three families added to the ten most abundant for the current survey (Pleuronectidae, Merlucciidae, Bathylagidae) have a generally cool-water affinity. Among the taxa declining most in relative larval abundance between the two studies were Clupeidae (Pacific sardine), which decreased from 6.0% to 0.4% of the total fish larvae, and Scombridae (Pacific mackerel), which declined from 1.4% to 0.03% of the fish larvae. Among the larger increases, Sebastidae (rockfishes) contributed 1.1% of the total larvae in the earlier study and 8.0% in the current study.

EXPLANATION OF TABLES

Table 1. This table lists for each tow the pertinent station and tow data, the volume of water filtered, and the total number of fish eggs and larvae for bongo net tow stations occupied during the 2004–2005 nearshore survey. Cruises are designated by four digits; the first two indicate the year and the second two the month. Within each cruise the data are listed in order by line (north to south) and station (inshore to offshore). Stations are designated by two groups of numbers corresponding to the CalCOFI grid (e.g., see Moser et al. 1993); the first set indicates the line and decimal fraction and the second set indicates the station and decimal fraction. Time is listed as Pacific Standard Time (PST) at the start of each tow in 24-hour designation. The values for total fish eggs and larvae are raw counts (unadjusted for volume of water filtered).

Table 2. Pooled occurrences of all fish egg taxa taken in bongo net tows on *La Mer* during the 2004–2005 nearshore survey. Taxa are listed in rank order.

Table 3. Pooled counts of all fish egg taxa taken in bongo net tows on *La Mer* during the 2004–2005 nearshore survey. Taxa are listed in rank order. Numbers are adjusted for standard haul factor.

Table 4. Pooled occurrences of all larval fish taxa taken in bongo net tows on *La Mer* during the 2004–2005 nearshore survey. Taxa are listed in rank order.

Table 5. Pooled counts of all larval fish taxa taken in bongo net tows on *La Mer* during the 2004–2005 nearshore survey. Taxa are listed in rank order. Numbers are adjusted for standard haul factor.

Table 6. Numbers of fish eggs for each taxon, listed by station and calendar month of the bongo net tow in 2004. Counts are adjusted for standard haul factor. Genera and species are listed alphabetically; higher taxa are listed in phylogenetic sequence (Eschmeyer 1998).

Table 7. Numbers of fish eggs for each taxon, listed by station and calendar month of the bongo net tow in 2005. Counts are adjusted for standard haul factor. Genera and species are listed alphabetically; higher taxa are listed in phylogenetic sequence (Eschmeyer 1998).

Table 8. Numbers of fish larvae for each taxon, listed by station and calendar month of the bongo net tow in 2004. Counts are adjusted for standard haul factor. Genera and species are listed alphabetically; higher taxa are listed in phylogenetic sequence (Eschmeyer 1998).

Table 9. Numbers of fish larvae for each taxon, listed by station and calendar month of the bongo net tow in 2005. Counts are adjusted for standard haul factor. Genera and species are listed alphabetically; higher taxa are listed in phylogenetic sequence (Eschmeyer 1998).

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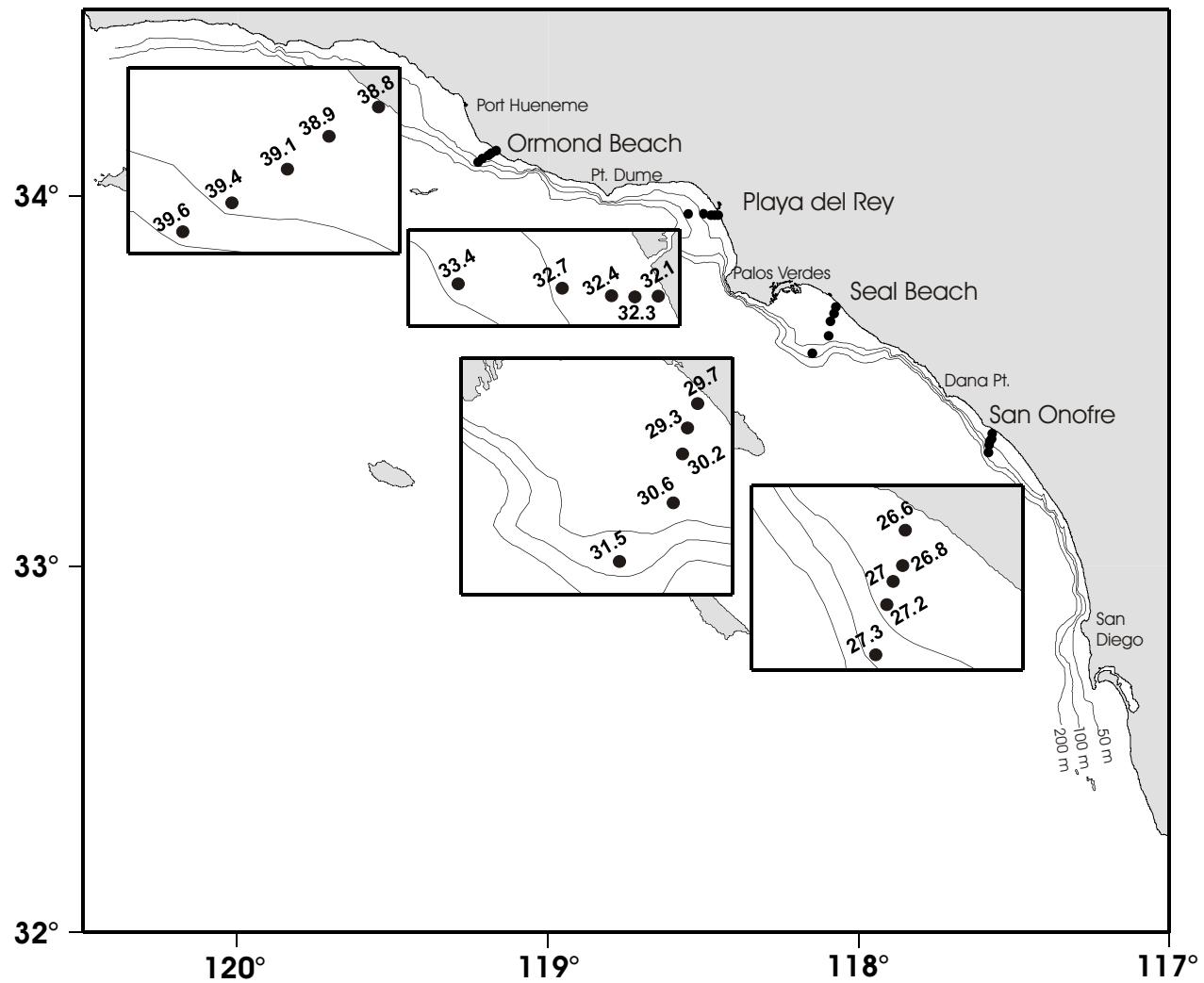


Figure 1. Nominal sampling stations occupied during the 2004-2005 nearshore ichthyoplankton survey. Sites sampled were Ormond Beach (approximately station line 84.3), Playa del Rey (approximately station line 86.5), Seal Beach (approximately station line 88.6), and San Onofre (approximately station line 91.0).

Table 1. Station and Bongo net tow data for *La Mer* cruises in 2004 and 2005. Counts for fish eggs and larvae are not adjusted for standard haul factor. Volume of water strained is given as cubic meters and plankton volume given as milliliters per 1000 cubic meters of water strained. Sampling site codes are: OB = Ormond Beach; PDR = Playa del Rey; SB = Seal Beach; SO = San Onofre.

La Mer Cruise 0401/0402

Line	Station	Sampling Site	Latitude (N) deg. min.	Longitude (W) deg. min.	Tow Date yr mo. day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Total Larvae	Total Eggs
84.2	38.8	OB	34 07.3	119 10.2	04 01 28	1016	9	13	6.54	75	0	49
84.3	38.9	OB	34 07.0	119 10.9	04 01 28	1040	16	28	5.93	36	1	58
84.3	39.1	OB	34 06.6	119 11.7	04 01 28	1101	24	42	5.81	72	0	34
84.3	39.4	OB	34 05.9	119 12.7	04 01 28	1133	37	76	4.87	65	3	10
84.3	39.6	OB	34 05.5	119 13.5	04 01 28	1227	76	111	6.83	27	2	33
86.5	32.1	PDR	33 57.0	118 27.2	04 01 27	1344	7	35	1.97	58	1	0
86.5	32.3	PDR	33 56.9	118 27.9	04 01 27	1317	16	32	4.82	93	0	0
86.5	32.4	PDR	33 56.8	118 28.5	04 01 27	1251	23	45	5.14	22	0	1
86.4	32.7	PDR	33 56.8	118 29.9	04 01 27	1215	37	75	4.96	53	1	19
86.3	33.4	PDR	33 57.5	118 34.1	04 01 27	1005	73	179	4.09	17	30	78
88.4	29.7	SB	33 42.1	118 04.5	04 02 17	1334	8	46	1.69	22	15	77
88.5	29.3	SB	33 41.2	118 04.7	04 02 17	1245	15	52	2.96	58	0	72
88.6	30.2	SB	33 39.6	118 04.9	04 02 17	1202	23	70	3.26	57	3	324
88.7	30.6	SB	33 37.3	118 05.7	04 02 17	1030	37	122	3.02	123	4	155
88.8	31.5	SB	33 34.6	118 08.4	04 02 17	0851	78	237	3.30	72	73	647
91.0	26.6	SO	33 21.6	117 34.1	04 02 18	1250	8	34	2.43	58	1	45
91.0	26.8	SO	33 20.7	117 34.4	04 02 18	1223	16	50	3.27	20	0	22
91.0	27.0	SO	33 20.4	117 34.6	04 02 18	1154	23	75	3.01	27	0	18
91.1	27.2	SO	33 19.6	117 34.5	04 02 18	1119	38	130	2.95	61	2	50
91.1	27.3	SO	33 18.3	117 35.1	04 02 18	1001	79	251	3.13	64	116	163

Table 1. (cont.)

La Mer Cruise 0404/0405

Line	Station	Sampling Site	Latitude (N) deg. min.	Longitude (W) deg. min.	Tow Date yr mo. day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Total Larvae	Total Eggs
84.2	38.8	OB	34 07.3	119 10.5	04 04 06	1325	7	41	1.61	24	0	131
84.3	38.9	OB	34 07.0	119 11.0	04 04 06	1254	15	61	2.46	16	3	182
84.3	39.1	OB	34 06.3	119 11.7	04 04 06	1225	23	80	2.94	13	3	419
84.3	39.4	OB	34 05.9	119 12.7	04 04 06	1148	36	131	2.77	31	2	678
84.3	39.6	OB	34 05.2	119 13.6	04 04 06	1046	74	272	2.73	103	20	1026
86.5	32.1	PDR	33 56.9	118 27.0	04 04 05	0823	8	30	2.70	33	0	417
86.5	32.3	PDR	33 57.0	118 28.0	04 04 05	0858	17	42	4.14	96	5	478
86.5	32.4	PDR	33 56.9	118 28.5	04 04 05	0938	23	74	3.10	134	11	960
86.4	32.7	PDR	33 56.8	118 30.0	04 04 05	1018	36	118	3.03	76	24	304
86.3	33.4	PDR	33 57.0	118 33.7	04 04 05	1121	74	264	2.82	83	63	265
88.4	29.7	SB	33 42.1	118 04.5	04 04 15	1125	8	39	2.08	182	1	545
88.5	29.3	SB	33 41.0	118 04.6	04 04 15	1044	15	54	2.76	92	13	320
88.6	30.2	SB	33 39.6	118 05.2	04 04 15	1014	22	101	2.12	148	123	494
88.7	30.6	SB	33 37.4	118 05.8	04 04 15	0933	40	149	2.65	148	158	780
88.8	31.5	SB	33 34.6	118 09.1	04 04 15	0825	78	304	2.57	152	395	1556
91.0	26.6	SO	33 21.3	117 33.6	04 04 14	1327	8	40	2.09	25	5	170
91.0	26.8	SO	33 20.5	117 34.1	04 04 14	1303	14	60	2.36	17	9	132
91.0	27.0	SO	33 20.4	117 34.8	04 04 14	1212	23	76	3.00	79	32	159
91.1	27.2	SO	33 19.8	117 34.8	04 04 14	1132	36	124	2.91	32	71	277
91.1	27.3	SO	33 18.5	117 35.4	04 04 14	1040	75	253	2.94	95	203	208

Table 1. (cont.)

La Mer Cruise 0410/0411

Line	Station	Sampling Site	Latitude (N)		Longitude (W)		Tow Date			Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Total Larvae	Total Eggs
			deg.	min.	deg.	min.	yr	mo.	day							
88.4	29.7	SB	33	42.2	118	04.5	04	10	25	1240	9	40	2.24	75	9	91
88.5	29.3	SB	33	41.0	118	04.7	04	10	25	1210	16	71	2.32	355	26	298
88.6	30.2	SB	33	39.6	118	05.1	04	10	25	1146	22	124	1.80	267	36	339
88.7	30.6	SB	33	37.3	118	05.7	04	10	25	1059	38	146	2.58	226	24	499
88.8	31.5	SB	33	34.6	118	09.1	04	10	25	0949	73	327	2.23	64	17	178
91.0	26.6	SO	33	21.3	117	33.5	04	10	26	1307	10	47	2.16	191	1	154
91.0	26.8	SO	33	20.9	117	34.5	04	10	26	1237	17	61	2.81	248	5	168
91.0	27.0	SO	33	20.5	117	34.8	04	10	26	1209	24	96	2.50	178	3	361
91.1	27.2	SO	33	19.8	117	34.8	04	10	26	1140	42	153	2.75	72	10	167
91.1	27.3	SO	33	18.7	117	35.8	04	10	26	1025	85	303	2.80	10	11	9
84.2	38.8	OB	34	07.3	119	10.3	04	12	06	1405	8	36	2.24	82	0	36
84.3	38.9	OB	34	07.0	119	11.0	04	12	06	1317	16	83	1.95	24	0	44
84.3	39.1	OB	34	06.6	119	11.7	04	12	06	1243	22	133	1.66	23	3	19
84.3	39.4	OB	34	06.1	119	12.9	04	12	06	1204	38	195	1.94	26	8	38
84.3	39.6	OB	34	05.4	119	13.6	04	12	06	1110	77	338	2.29	12	15	44
86.5	32.1	PDR	33	56.9	118	27.3	04	11	22	1441	16	123	1.28	24	0	42
86.5	32.3	PDR	33	56.9	118	28.1	04	11	22	1425	23	102	2.23	69	4	147
86.5	32.4	PDR	33	57.0	118	28.7	04	11	22	1327	28	95	2.91	35	9	155
86.4	32.7	PDR	33	57.0	118	30.2	04	11	22	1238	46	152	3.02	37	17	101
86.3	33.4	PDR	33	57.2	118	34.0	04	11	22	1124	89	202	4.43	33	7	266

Table 1. (cont.)

La Mer Cruise 0501/0502

Line	Station	Sampling Site	Latitude (N) deg. min.	Longitude (W) deg. min.	Tow Date yr mo. day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Total Larvae	Total Eggs
88.4	29.7	SB	33 42.2	118 04.4	05 01 24	1304	9	34	2.58	32	4	106
88.5	29.3	SB	33 40.9	118 04.6	05 01 24	1223	17	66	2.63	38	11	221
88.6	30.2	SB	33 39.5	118 04.9	05 01 24	1144	24	119	2.04	11	65	741
88.7	30.6	SB	33 37.5	118 05.9	05 01 24	1045	37	139	2.68	12	112	937
88.8	31.5	SB	33 34.6	118 09.3	05 01 24	0941	75	300	2.48	50	126	1287
91.0	26.6	SO	33 21.8	117 34.1	05 01 25	1312	9	44	2.01	23	5	42
91.0	26.8	SO	33 20.8	117 34.3	05 01 25	1234	16	62	2.60	1053	5	158
91.0	27.0	SO	33 20.3	117 34.6	05 01 25	1156	24	109	2.23	55	64	530
91.1	27.2	SO	33 19.6	117 34.5	05 01 25	1117	41	167	2.47	102	187	4140
91.1	27.3	SO	33 18.4	117 35.4	05 01 25	1028	79	328	2.41	40	364	3720
84.2	38.8	OB	34 07.3	119 10.2	05 02 14	1406	7	84	.84	12	6	8
84.3	38.9	OB	34 06.8	119 10.9	05 02 14	1333	15	109	1.40	55	13	37
84.3	39.1	OB	34 06.5	119 11.6	05 02 14	1303	22	163	1.37	43	60	71
84.3	39.4	OB	34 06.0	119 12.8	05 02 14	1226	36	213	1.69	42	13	6
84.3	39.6	OB	34 05.5	119 13.6	05 02 14	1142	73	390	1.87	15	7	0
86.5	32.1	PDR	33 56.9	118 27.3	05 02 02	1302	7	40	1.85	202	0	51
86.5	32.3	PDR	33 56.8	118 27.9	05 02 02	1215	17	90	1.93	78	28	16
86.5	32.4	PDR	33 56.8	118 28.5	05 02 02	1136	23	112	2.08	80	7	464
86.4	32.7	PDR	33 57.0	118 30.2	05 02 02	1101	34	179	1.88	39	14	144
86.3	33.4	PDR	33 57.2	118 33.8	05 02 02	0959	71	307	2.31	23	20	24

Table 1. (cont.)

La Mer Cruise 0504

Line	Station	Sampling Site	Latitude (N) deg. min.	Longitude (W) deg. min.	Tow Date yr mo. day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Total Larvae	Total Eggs
84.2	38.8	OB	34 07.3	119 10.1	05 04 26	1445	9	54	1.62	111	2	1446
84.3	38.9	OB	34 06.9	119 11.0	05 04 26	1341	16	85	1.86	106	28	4412
84.3	39.1	OB	34 06.5	119 11.6	05 04 26	1255	24	89	2.68	1031	77	1789
84.3	39.4	OB	34 06.0	119 12.8	05 04 26	1155	40	147	2.71	1162	77	1589
84.3	39.6	OB	34 05.5	119 13.6	05 04 26	1048	79	304	2.60	741	79	1826
86.5	32.1	PDR	33 56.9	118 27.2	05 04 25	1326	9	44	1.95	23	0	13
86.5	32.3	PDR	33 56.9	118 27.9	05 04 25	1245	16	82	2.00	12	0	169
86.5	32.4	PDR	33 56.9	118 28.6	05 04 25	1144	23	100	2.28	261	9	544
86.4	32.7	PDR	33 57.1	118 30.1	05 04 25	1037	40	147	2.74	1126	33	1206
86.3	33.4	PDR	33 57.2	118 33.9	05 04 25	0921	78	294	2.64	877	438	537
88.4	29.7	SB	33 42.1	118 04.4	05 04 18	1516	10	55	1.74	92	2	54
88.5	29.3	SB	33 41.0	118 04.8	05 04 18	1433	16	64	2.45	110	11	467
88.6	30.2	SB	33 39.8	118 05.4	05 04 18	1253	31	108	2.89	231	98	3076
88.7	30.6	SB	33 37.4	118 05.8	05 04 18	1113	35	141	2.45	198	931	20265
88.8	31.5	SB	33 34.6	118 08.9	05 04 18	0914	82	273	3.01	128	176	5875
91.0	26.6	SO	33 21.6	117 34.2	05 04 19	1427	9	43	2.02	164	1	80
91.0	26.8	SO	33 20.7	117 34.3	05 04 19	1357	16	68	2.34	162	1	124
91.0	27.0	SO	33 20.3	117 34.6	05 04 19	1327	24	84	2.84	107	1	219
91.1	27.2	SO	33 19.7	117 34.8	05 04 19	1254	40	147	2.70	48	25	729
91.1	27.3	SO	33 18.4	117 35.4	05 04 19	1203	80	338	2.37	98	118	2472

Table 1. (cont.)

La Mer Cruise 0507

Line	Station	Sampling Site	Latitude (N) deg. min.	Longitude (W) deg. min.	Tow Date yr mo. day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Total Larvae	Total Eggs
84.2	38.8	OB	34 07.3	119 10.4	05 07 07	1235	9	56	1.52	18	1	154
84.3	38.9	OB	34 06.9	119 10.9	05 07 07	1202	15	124	1.24	57	0	86
84.3	39.1	OB	34 06.6	119 11.6	05 07 07	1125	23	126	1.82	16	0	87
84.3	39.4	OB	34 06.0	119 12.8	05 07 07	1043	38	218	1.72	83	0	101
84.3	39.6	OB	34 05.5	119 13.6	05 07 07	0948	76	403	1.88	196	2	32
86.5	32.1	PDR	33 57.0	118 27.2	05 07 06	1144	8	49	1.65	20	1	1474
86.5	32.3	PDR	33 56.9	118 28.0	05 07 06	1104	16	92	1.73	11	3	650
86.5	32.4	PDR	33 57.1	118 28.7	05 07 06	1030	23	132	1.78	15	10	946
86.4	32.7	PDR	33 56.9	118 30.1	05 07 06	0936	38	197	1.90	46	10	230
86.3	33.4	PDR	33 57.3	118 33.9	05 07 06	0809	79	369	2.14	95	2	118
88.4	29.7	SB	33 42.4	118 04.6	05 06 29	1312	9	35	2.62	28	0	373
88.5	29.3	SB	33 41.1	118 01.7	05 06 29	1232	19	63	2.99	32	1	121
88.6	30.2	SB	33 39.6	118 05.1	05 06 29	1142	26	100	2.63	231	1	432
88.7	30.6	SB	33 37.3	118 05.6	05 06 29	1052	36	185	1.96	379	1	233
88.8	31.5	SB	33 34.7	118 08.5	05 06 29	0944	78	263	2.95	484	11	69
91.0	26.6	SO	33 21.8	117 33.9	05 06 30	1358	8	72	1.10	41	1	165
91.0	26.8	SO	33 21.0	117 34.2	05 06 30	1328	17	84	2.00	95	0	370
91.0	27.0	SO	33 20.1	117 34.4	05 06 30	1212	26	125	2.08	112	0	440
91.1	27.2	SO	33 19.0	117 35.0	05 06 30	1118	43	132	3.29	61	17	267
91.1	27.3	SO	33 18.4	117 35.3	05 06 30	1000	77	310	2.48	110	3	336

Table 2. Pooled occurrences of fish eggs taken in Bongo net tows on *La Mer* surveys in 2004 and 2005.

Rank	Taxon	Occurrences
1	<i>Citharichthys stigmaeus</i>	103
2	<i>Paralichthys californicus</i>	91
3	<i>Engraulis mordax</i>	79
4	<i>Genyonemus lineatus</i>	77
5	<i>Pleuronichthys verticalis</i>	68
6	Unidentified fish eggs	55
7	<i>Pleuronichthys ritteri</i>	37
8	Disintegrated fish eggs	33
8	Sciaenidae	33
10	<i>Parophrys vetulus</i>	24
11	<i>Sardinops sagax</i>	21
12	<i>Oxyjulis californica</i>	17
13	<i>Merluccius productus</i>	15
14	<i>Syphurus atricaudus</i>	14
15	<i>Hippoglossina stomata</i>	11
15	<i>Pleuronichthys coenosus</i>	11
17	<i>Citharichthys</i> spp.	10
17	<i>Peprilus simillimus</i>	10
17	<i>Trachurus symmetricus</i>	10
17	<i>Semicossyphus pulcher</i>	10
17	<i>Bathylagus stilbius</i>	10
22	Pleuronectiformes	8
22	<i>Xystreurus liolepis</i>	8
22	<i>Atractoscion nobilis</i>	8
25	Ophidiidae	7
25	<i>Lyopsetta exilis</i>	7
25	<i>Ophidion scrippsae</i>	7
28	<i>Scomber japonicus</i>	6
29	Perciformes	4
30	<i>Sphyraena argentea</i>	3
30	<i>Citharichthys sordidus</i>	3
30	<i>Glyptocephalus zachirus</i>	3
30	<i>Hypsopsetta guttulata</i>	3
34	<i>Microstomus pacificus</i>	2
34	<i>Argentina sialis</i>	2
36	<i>Icosteus aenigmaticus</i>	1
36	<i>Scorpaena</i> spp.	1
36	<i>Stomias atriventer</i>	1
36	<i>Lipolagus ochotensis</i>	1
36	<i>Pleuronichthys decurrens</i>	1
36	<i>Tetragonurus cuvieri</i>	1
	Total	816

Table 3. Pooled counts of fish eggs taken in Bongo net tows on *La Mer* surveys in 2004 and 2005.
Counts are adjusted for standard haul factor (see text).

Rank	Taxon	Count
1	<i>Engraulis mordax</i>	191373
2	<i>Citharichthys stigmaeus</i>	19325
3	<i>Genyonemus lineatus</i>	14798
4	<i>Paralichthys californicus</i>	7781
5	Sciaenidae	3644
6	<i>Bathylagus stilbius</i>	2416
7	<i>Oxyjulis californica</i>	1827
8	Unidentified fish eggs	1612
9	<i>Sardinops sagax</i>	1349
10	<i>Parophrys vetulus</i>	1094
11	<i>Pleuronichthys verticalis</i>	1060
12	<i>Xystreurus liolepis</i>	894
13	Pleuronectiformes	672
14	<i>Pleuronichthys ritteri</i>	645
15	<i>Ophidion scrippsae</i>	487
16	<i>Syphurus atricaudus</i>	453
17	<i>Merluccius productus</i>	439
18	<i>Semicossyphus pulcher</i>	226
19	Disintegrated fish eggs	175
20	<i>Scomber japonicus</i>	173
21	<i>Trachurus symmetricus</i>	164
22	<i>Glyptocephalus zachirus</i>	87
23	Perciformes	84
24	<i>Lyopsetta exilis</i>	78
25	<i>Sphyraena argentea</i>	76
26	<i>Citharichthys</i> spp.	63
26	<i>Atractoscion nobilis</i>	63
28	<i>Peprilus simillimus</i>	58
29	<i>Pleuronichthys coenosus</i>	52
30	<i>Hypsopsetta guttulata</i>	47
30	<i>Citharichthys sordidus</i>	47
32	<i>Hippoglossina stomata</i>	46
33	Ophidiidae	40
34	<i>Argentina sialis</i>	14
35	<i>Tetragonurus cuvieri</i>	11
36	<i>Lipolagus ochotensis</i>	10
37	<i>Microstomus pacificus</i>	5
37	<i>Icosteus aenigmaticus</i>	5
39	<i>Scorpaena</i> spp.	4
39	<i>Pleuronichthys decurrens</i>	4
41	<i>Stomias atriventer</i>	3
	Total	251404

Table 4. Pooled occurrences of fish larvae taken in Bongo net tows on *La Mer* surveys in 2004 and 2005.

Rank	Taxon	Occurrences
1	<i>Engraulis mordax</i>	60
2	<i>Genyonemus lineatus</i>	39
3	<i>Sebastes</i> spp.	30
3	<i>Paralichthys californicus</i>	30
5	<i>Stenobrachius leucopsarus</i>	25
6	<i>Merluccius productus</i>	17
7	<i>Citharichthys stigmaeus</i>	14
8	<i>Pleuronichthys verticalis</i>	12
9	<i>Hypsoblennius jenkinsi</i>	11
9	<i>Lepidogobius lepidus</i>	11
9	<i>Sardinops sagax</i>	11
12	<i>Parophrys vetulus</i>	9
12	<i>Lyopsetta exilis</i>	9
12	<i>Hypsopsetta guttulata</i>	9
15	<i>Sebastes jordani</i>	8
15	<i>Rhinogobiops nicholsii</i>	8
17	<i>Citharichthys</i> spp.	7
17	<i>Pleuronichthys ritteri</i>	7
19	<i>Lipolagus ochotensis</i>	6
19	<i>Typhlogobius californiensis</i>	6
21	<i>Hypsoblennius</i> spp.	5
21	<i>Peprilus simillimus</i>	5
23	<i>Triphoturus mexicanus</i>	4
23	<i>Icelinus quadriseriatus</i>	4
23	Disintegrated fish larvae	4
23	<i>Sebastes levis</i>	4
23	<i>Atherinopsis californiensis</i>	4
23	<i>Ilypnus gilberti</i>	4
23	<i>Citharichthys sordidus</i>	4
23	<i>Bathylagus stilbius</i>	4
31	<i>Cataetyx rubrirostris</i>	3
31	<i>Hypsoblennius gilberti</i>	3
31	<i>Menticirrhus undulatus</i>	3
31	<i>Argentina sialis</i>	3
35	<i>Leptocottus armatus</i>	2
35	<i>Scorpaenichthys marmoratus</i>	2
35	<i>Oxyjulis californica</i>	2
35	<i>Xeneretmus latifrons</i>	2
35	<i>Atractoscion nobilis</i>	2
35	<i>Seriphus politus</i>	2
35	<i>Girella nigricans</i>	2
35	<i>Nannobrachium</i> spp.	2
35	<i>Gibbonsia</i> spp.	2
35	<i>Cyclothona signata</i>	2
45	<i>Protomyctophum crockeri</i>	1
45	<i>Tarletonbeania crenularis</i>	1

Table 4. (cont.)

Rank	Taxon	Occurrences
45	<i>Nannobrachium ritteri</i>	1
45	<i>Chilara taylori</i>	1
45	<i>Ophidion scrippsae</i>	1
45	Sciaenidae	1
45	<i>Bathylagus pacificus</i>	1
45	<i>Diaphus</i> spp.	1
45	<i>Cheilotrema saturnum</i>	1
45	<i>Pleuronichthys decurrens</i>	1
45	<i>Scomber japonicus</i>	1
45	<i>Lythrypnus dalli</i>	1
45	<i>Gillichthys mirabilis</i>	1
45	<i>Clevelandia ios</i>	1
45	<i>Heterostichus rostratus</i>	1
45	<i>Chromis punctipinnis</i>	1
45	<i>Paralabrax</i> spp.	1
45	<i>Roncador stearnsii</i>	1
45	<i>Leuresthes tenuis</i>	1
45	<i>Anisotremus davidsoni</i>	1
45	<i>Odontopyxis trispinosa</i>	1
45	<i>Bathyagonus pentacanthus</i>	1
45	<i>Oligocottus maculosus</i>	1
45	<i>Zaniolepis latipinnis</i>	1
45	<i>Zaniolepis frenata</i>	1
45	<i>Sebastes diploproa</i>	1
45	<i>Sebastes aurora</i>	1
45	<i>Hermosilla azurea</i>	1
	Total	431

Table 5. Pooled counts of fish larvae taken in Bongo net tows on *La Mer* surveys in 2004 and 2005.
Counts are adjusted for standard haul factor (see text).

Rank	Taxon	Count
1	<i>Engraulis mordax</i>	12648
2	<i>Sebastes</i> spp.	1296
3	<i>Stenobrachius leucopsarus</i>	683
4	<i>Genyonemus lineatus</i>	659
5	<i>Paralichthys californicus</i>	376
6	<i>Merluccius productus</i>	358
7	<i>Parophrys vetulus</i>	296
8	<i>Lyopsetta exilis</i>	235
9	<i>Lepidogobius lepidus</i>	179
10	<i>Hypsoblennius jenkinsi</i>	98
11	<i>Sebastes jordani</i>	93
11	<i>Lipolagus ochotensis</i>	93
13	<i>Citharichthys stigmaeus</i>	79
14	<i>Sardinops sagax</i>	69
15	<i>Bathylagus stilbius</i>	67
16	<i>Cataetyx rubrirostris</i>	47
16	<i>Peprilus simillimus</i>	47
18	<i>Citharichthys</i> spp.	45
18	<i>Pleuronichthys verticalis</i>	45
20	<i>Hypsopsetta guttulata</i>	36
20	<i>Rhinogobiops nicholsii</i>	36
22	<i>Ilypnus gilberti</i>	32
23	<i>Pleuronichthys ritteri</i>	24
24	<i>Sebastes levis</i>	23
25	<i>Typhlogobius californiensis</i>	22
25	<i>Icelinus quadriseriatus</i>	22
27	<i>Triphoturus mexicanus</i>	15
28	<i>Hypsoblennius</i> spp.	12
29	Disintegrated fish larvae	11
29	<i>Atherinopsis californiensis</i>	11
31	<i>Hypsoblennius gilberti</i>	10
32	<i>Citharichthys sordidus</i>	9
33	<i>Menticirrhus undulatus</i>	8
33	<i>Seriphis politus</i>	8
33	<i>Argentina sialis</i>	8
36	<i>Xeneretmus latifrons</i>	7
36	<i>Oxyjulis californica</i>	7
36	<i>Girella nigricans</i>	7
39	<i>Atractoscion nobilis</i>	6
39	<i>Scomber japonicus</i>	6
39	<i>Chilara taylori</i>	6
42	<i>Gibbonsia</i> spp.	5
42	<i>Hermosilla azurea</i>	5
42	<i>Scorpaenichthys marmoratus</i>	5
42	<i>Cyclothona signata</i>	5
46	<i>Nannobrachium</i> spp.	4

Table 5. (cont.)

Rank	Taxon	Count
46	<i>Anisotremus davidsoni</i>	4
46	<i>Roncador stearnsii</i>	4
46	<i>Sebastes diploproa</i>	4
46	<i>Leptocottus armatus</i>	4
51	<i>Paralabrax</i> spp.	3
51	<i>Odontopyxis trispinosa</i>	3
51	<i>Lythrypnus dalli</i>	3
51	<i>Sebastes aurora</i>	3
51	<i>Bathylagus pacificus</i>	3
51	<i>Bathyagonus pentacanthus</i>	3
51	<i>Heterostichus rostratus</i>	3
51	<i>Protomyctophum crockeri</i>	3
51	<i>Zaniolepis frenata</i>	3
51	<i>Ophidion scrippsae</i>	3
51	<i>Chromis punctipinnis</i>	3
51	<i>Pleuronichthys decurrens</i>	3
51	<i>Tarletonbeania crenularis</i>	3
64	<i>Clevelandia ios</i>	2
64	<i>Leuresthes tenuis</i>	2
64	<i>Diaphus</i> spp.	2
64	<i>Oligocottus maculosus</i>	2
64	<i>Cheilotrema saturnum</i>	2
64	<i>Zaniolepis latipinnis</i>	2
64	<i>Gillichthys mirabilis</i>	2
64	<i>Sciaenidae</i>	2
64	<i>Nannobrachium ritteri</i>	2
	Total	17836

Table 6. Number of fish eggs taken in Bongo net tows at stations occupied on *La Mer* cruises in 2004. Counts are adjusted for standard haul factor (see text). Unoccupied stations are indicated by a dash.

<i>Sardinops sagax</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.5 32.4	0.0	-	-	3.1	-	-	-	-	-	-	0.0	-	
88.6 30.2	-	0.0	-	25.4	-	-	-	-	-	18.0	-	-	
88.7 30.6	-	0.0	-	410.8	-	-	-	-	-	477.3	-	-	
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-	
91.0 26.6	-	0.0	-	0.0	-	-	-	-	-	8.6	-	-	
91.0 26.8	-	0.0	-	0.0	-	-	-	-	-	8.4	-	-	
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	12.5	-	-	
<i>Engraulis mordax</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.2 38.8	0.0	-	-	6.4	-	-	-	-	-	-	-	0.0	
84.3 38.9	0.0	-	-	24.6	-	-	-	-	-	-	-	0.0	
84.3 39.1	0.0	-	-	26.5	-	-	-	-	-	-	-	0.0	
84.3 39.4	0.0	-	-	2.8	-	-	-	-	-	-	-	0.0	
84.3 39.6	0.0	-	-	98.3	-	-	-	-	-	-	-	0.0	
86.3 33.4	77.7	-	-	124.1	-	-	-	-	-	-	686.7	-	
86.4 32.7	9.9	-	-	563.6	-	-	-	-	-	-	3.0	-	
86.5 32.1	0.0	-	-	32.4	-	-	-	-	-	-	0.0	-	
86.5 32.3	0.0	-	-	273.2	-	-	-	-	-	-	0.0	-	
86.5 32.4	0.0	-	-	517.7	-	-	-	-	-	-	0.0	-	
88.4 29.7	-	0.0	-	16.6	-	-	-	-	-	2.2	-	-	
88.5 29.3	-	0.0	-	91.1	-	-	-	-	-	2.3	-	-	
88.6 30.2	-	0.0	-	349.8	-	-	-	-	-	1.8	-	-	
88.7 30.6	-	57.4	-	1030.9	-	-	-	-	-	7.7	-	-	
88.8 31.5	-	72.6	-	3204.8	-	-	-	-	-	0.0	-	-	
91.0 26.6	-	0.0	-	2.1	-	-	-	-	-	6.5	-	-	
91.0 26.8	-	0.0	-	59.0	-	-	-	-	-	11.2	-	-	
91.0 27.0	-	0.0	-	261.0	-	-	-	-	-	2.5	-	-	
91.1 27.2	-	8.9	-	465.6	-	-	-	-	-	2.8	-	-	
91.1 27.3	-	109.6	-	226.4	-	-	-	-	-	0.0	-	-	

Table 6. (cont.)

<i>Argentina sialis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	0.0	-	-	2.7	-	-	-	-	-	-	-	0.0	
<i>Bathylagus stilbius</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	0.0	-	-	57.3	-	-	-	-	-	-	-	0.0	
86.3 33.4	0.0	-	-	56.4	-	-	-	-	-	-	0.0	-	
88.7 30.6	-	9.1	-	0.0	-	-	-	-	-	0.0	-	-	
88.8 31.5	-	1871.1	-	161.9	-	-	-	-	-	0.0	-	-	
91.1 27.3	-	106.4	-	47.0	-	-	-	-	-	0.0	-	-	
<i>Lipolagus ochotensis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	-	0.0	-	10.3	-	-	-	-	-	0.0	-	-	
<i>Stomias atriventris</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-	
<i>Merluccius productus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.4	0.0	-	-	2.8	-	-	-	-	-	-	-	0.0	
84.3 39.6	54.6	-	-	92.8	-	-	-	-	-	-	-	0.0	
86.3 33.4	8.2	-	-	0.0	-	-	-	-	-	-	0.0	-	
88.7 30.6	-	6.0	-	0.0	-	-	-	-	-	0.0	-	-	
88.8 31.5	-	39.6	-	41.1	-	-	-	-	-	0.0	-	-	
91.1 27.2	-	0.0	-	26.2	-	-	-	-	-	0.0	-	-	
91.1 27.3	-	21.9	-	23.5	-	-	-	-	-	0.0	-	-	
<i>Ophidion scrippae</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	10.8	-	-	
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	80.0	-	-	
88.8 31.5	-	0.0	-	0.0	-	-	-	-	-	370.2	-	-	
91.0 26.6	-	0.0	-	0.0	-	-	-	-	-	4.3	-	-	
91.0 26.8	-	0.0	-	0.0	-	-	-	-	-	11.2	-	-	
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	5.0	-	-	
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	5.5	-	-	

Table 6. (cont.)

Station	<i>Trachurus symmetricus</i>											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.3 33.4	0.0	-	-	0.0	-	-	-	-	-	-	13.3	-
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	7.0	-	-
88.8 31.5	-	0.0	-	7.7	-	-	-	-	-	0.0	-	-
91.0 27.0	-	0.0	-	27.0	-	-	-	-	-	0.0	-	-
<i>Sciaenidae</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.6	0.0	-	-	10.9	-	-	-	-	-	-	-	0.0
86.4 32.7	0.0	-	-	3.0	-	-	-	-	-	-	0.0	-
86.5 32.1	0.0	-	-	24.3	-	-	-	-	-	-	0.0	-
86.5 32.3	0.0	-	-	95.2	-	-	-	-	-	-	0.0	-
86.5 32.4	0.0	-	-	65.1	-	-	-	-	-	-	0.0	-
88.4 29.7	-	0.0	-	139.4	-	-	-	-	-	58.2	-	-
88.5 29.3	-	0.0	-	88.3	-	-	-	-	-	148.5	-	-
88.6 30.2	-	0.0	-	97.5	-	-	-	-	-	208.8	-	-
91.0 26.6	-	0.0	-	6.3	-	-	-	-	-	0.0	-	-
91.0 26.8	-	0.0	-	21.2	-	-	-	-	-	0.0	-	-
<i>Atractoscion nobilis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.4 32.7	0.0	-	-	9.1	-	-	-	-	-	-	0.0	-
88.8 31.5	-	0.0	-	10.3	-	-	-	-	-	0.0	-	-
91.1 27.3	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
<i>Genyonemus lineatus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	6.5	-	-	41.9	-	-	-	-	-	-	-	9.0
84.3 38.9	0.0	-	-	182.0	-	-	-	-	-	-	-	21.5
84.3 39.1	0.0	-	-	579.2	-	-	-	-	-	-	-	13.3
84.3 39.4	4.9	-	-	828.2	-	-	-	-	-	-	-	38.8
84.3 39.6	34.2	-	-	1100.2	-	-	-	-	-	-	-	9.2
86.3 33.4	106.3	-	-	208.7	-	-	-	-	-	-	425.3	-
86.4 32.7	14.9	-	-	239.4	-	-	-	-	-	-	178.2	-
86.5 32.1	0.0	-	-	153.9	-	-	-	-	-	-	19.2	-
86.5 32.3	0.0	-	-	236.0	-	-	-	-	-	-	100.4	-

Table 6. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Genyonemus lineatus</i> (cont.)								Nov.	Dec.
					May	June	July	Aug.	Sep.	Oct.				
86.5 32.4	0.0	-	-	124.0	-	-	-	-	-	-	-	282.3	-	-
88.4 29.7	-	54.1	-	101.9	-	-	-	-	-	0.0	-	-	-	-
88.5 29.3	-	85.8	-	129.7	-	-	-	-	-	0.0	-	-	-	-
88.6 30.2	-	401.0	-	135.7	-	-	-	-	-	0.0	-	-	-	-
88.7 30.6	-	226.5	-	53.0	-	-	-	-	-	0.0	-	-	-	-
88.8 31.5	-	59.4	-	102.8	-	-	-	-	-	0.0	-	-	-	-
91.0 26.6	-	24.3	-	0.0	-	-	-	-	-	4.3	-	-	-	-
91.0 27.0	-	0.0	-	24.0	-	-	-	-	-	0.0	-	-	-	-
91.1 27.2	-	5.9	-	23.3	-	-	-	-	-	0.0	-	-	-	-
91.1 27.3	-	59.5	-	158.8	-	-	-	-	-	0.0	-	-	-	-
<i>Oxyjulis californica</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
86.5 32.1	0.0	-	-	10.8	-	-	-	-	-	-	0.0	-	-	-
88.4 29.7	-	0.0	-	0.0	-	-	-	-	-	56.0	-	-	-	-
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-	-	-
<i>Semicossyphus pulcher</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
88.7 30.6	-	0.0	-	8.0	-	-	-	-	-	0.0	-	-	-	-
<i>Sphyraena argentea</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
88.7 30.6	-	0.0	-	10.6	-	-	-	-	-	0.0	-	-	-	-
<i>Scomber japonicus</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
88.7 30.6	-	0.0	-	31.8	-	-	-	-	-	0.0	-	-	-	-
<i>Peprilus simillimus</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
86.3 33.4	0.0	-	-	0.0	-	-	-	-	-	-	4.4	-	-	-
86.4 32.7	0.0	-	-	0.0	-	-	-	-	-	-	3.0	-	-	-
86.5 32.4	0.0	-	-	0.0	-	-	-	-	-	-	2.9	-	-	-
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	1.8	-	-	-	-
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	25.8	-	-	-	-
88.8 31.5	-	0.0	-	0.0	-	-	-	-	-	2.2	-	-	-	-

Table 6. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Peprilus simillimus</i> (cont.)							
					May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.0 26.6	-	0.0	-	0.0	-	-	-	-	-	2.2	-	-
91.0 26.8	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	5.0	-	-
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	8.3	-	-
<i>Citharichthys</i> spp.												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	6.5	-	-	0.0	-	-	-	-	-	-	-	0.0
84.3 39.6	13.7	-	-	0.0	-	-	-	-	-	-	-	0.0
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-
91.1 27.2	-	20.7	-	0.0	-	-	-	-	-	0.0	-	-
91.1 27.3	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
<i>Citharichthys sordidus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.5 32.4	0.0	-	-	34.1	-	-	-	-	-	-	0.0	-
<i>Citharichthys stigmatus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	307.4	-	-	125.6	-	-	-	-	-	-	-	69.4
84.3 38.9	296.5	-	-	187.0	-	-	-	-	-	-	-	56.6
84.3 39.1	145.3	-	-	408.7	-	-	-	-	-	-	-	5.0
84.3 39.4	4.9	-	-	803.3	-	-	-	-	-	-	-	9.7
84.3 39.6	34.2	-	-	480.5	-	-	-	-	-	-	-	0.0
86.3 33.4	0.0	-	-	0.0	-	-	-	-	-	-	4.4	-
86.4 32.7	34.7	-	-	18.2	-	-	-	-	-	-	27.2	-
86.5 32.1	0.0	-	-	845.1	-	-	-	-	-	-	32.0	-
86.5 32.3	0.0	-	-	1072.3	-	-	-	-	-	-	211.9	-
86.5 32.4	5.1	-	-	1810.4	-	-	-	-	-	-	81.5	-
88.4 29.7	-	20.3	-	626.1	-	-	-	-	-	35.8	-	-
88.5 29.3	-	50.3	-	347.8	-	-	-	-	-	176.3	-	-
88.6 30.2	-	205.4	-	235.3	-	-	-	-	-	156.6	-	-
88.7 30.6	-	117.8	-	220.0	-	-	-	-	-	227.0	-	-
91.0 26.6	-	65.6	-	311.4	-	-	-	-	-	170.6	-	-
91.0 26.8	-	62.1	-	144.0	-	-	-	-	-	227.6	-	-

Table 6. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Citharichthys stigmaeus</i> (cont.)							
					May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.0 27.0	-	54.2	-	78.0	-	-	-	-	-	357.5	-	-
91.1 27.2	-	67.9	-	183.3	-	-	-	-	-	178.8	-	-
91.1 27.3	-	21.9	-	0.0	-	-	-	-	-	0.0	-	-
<i>Hippoglossina stomata</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.4	0.0	-	-	2.8	-	-	-	-	-	-	-	0.0
88.8 31.5	-	3.3	-	0.0	-	-	-	-	-	0.0	-	-
<i>Paralichthys californicus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	0.0	-	-	32.2	-	-	-	-	-	-	-	2.2
84.3 38.9	41.5	-	-	34.4	-	-	-	-	-	-	-	7.8
84.3 39.1	52.3	-	-	147.0	-	-	-	-	-	-	-	13.3
84.3 39.4	39.0	-	-	119.1	-	-	-	-	-	-	-	23.3
84.3 39.6	20.5	-	-	644.3	-	-	-	-	-	-	-	84.7
86.3 33.4	28.6	-	-	2.8	-	-	-	-	-	-	22.2	-
86.4 32.7	29.8	-	-	60.6	-	-	-	-	-	-	15.1	-
86.5 32.1	0.0	-	-	16.2	-	-	-	-	-	-	1.3	-
86.5 32.3	0.0	-	-	149.0	-	-	-	-	-	-	8.9	-
86.5 32.4	0.0	-	-	344.1	-	-	-	-	-	-	5.8	-
88.4 29.7	-	43.9	-	203.8	-	-	-	-	-	0.0	-	-
88.5 29.3	-	65.1	-	168.4	-	-	-	-	-	0.0	-	-
88.6 30.2	-	404.2	-	192.9	-	-	-	-	-	0.0	-	-
88.7 30.6	-	15.1	-	280.9	-	-	-	-	-	118.7	-	-
88.8 31.5	-	85.8	-	0.0	-	-	-	-	-	8.9	-	-
91.0 26.6	-	19.4	-	25.1	-	-	-	-	-	92.9	-	-
91.0 26.8	-	9.8	-	75.5	-	-	-	-	-	123.6	-	-
91.0 27.0	-	0.0	-	87.0	-	-	-	-	-	147.5	-	-
91.1 27.2	-	41.3	-	93.1	-	-	-	-	-	24.8	-	-
91.1 27.3	-	187.8	-	135.2	-	-	-	-	-	0.0	-	-
<i>Xystreurus liolepis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	113.7	-	-

Table 6. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Xystreurus liolepis</i> (cont.)								Oct.	Nov.	Dec.
					May	June	July	Aug.	Sep.						
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	63.0	-	-	-	-	-
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	131.6	-	-	-	-	-
88.8 31.5	-	0.0	-	0.0	-	-	-	-	-	4.5	-	-	-	-	-
91.0 26.6	-	0.0	-	0.0	-	-	-	-	-	30.2	-	-	-	-	-
91.0 26.8	-	0.0	-	0.0	-	-	-	-	-	28.1	-	-	-	-	-
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	295.0	-	-	-	-	-
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	228.3	-	-	-	-	-
<i>Glyptocephalus zachirus</i>															
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.			
88.8 31.5	-	0.0	-	5.1	-	-	-	-	-	0.0	-	-	-	-	-
<i>Hypsopsetta guttulata</i>															
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.			
84.3 39.4	0.0	-	-	36.0	-	-	-	-	-	-	-	-	-	-	0.0
88.4 29.7	-	0.0	-	8.3	-	-	-	-	-	0.0	-	-	-	-	-
91.1 27.2	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-	-	-	-
<i>Lyopsetta exilis</i>															
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.			
84.3 39.6	0.0	-	-	5.5	-	-	-	-	-	-	-	-	-	-	0.0
86.4 32.7	0.0	-	-	3.0	-	-	-	-	-	-	-	-	-	-	0.0
91.1 27.3	-	0.0	-	8.8	-	-	-	-	-	0.0	-	-	-	-	-
<i>Microstomus pacificus</i>															
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.			
88.8 31.5	-	3.3	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-
<i>Parophrys vetulus</i>															
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.			
84.3 39.1	0.0	-	-	11.8	-	-	-	-	-	-	-	-	-	-	0.0
84.3 39.4	0.0	-	-	36.0	-	-	-	-	-	-	-	-	-	-	0.0
84.3 39.6	41.0	-	-	262.1	-	-	-	-	-	-	-	-	-	-	2.3
86.3 33.4	85.9	-	-	287.6	-	-	-	-	-	-	-	-	-	-	0.0
86.4 32.7	5.0	-	-	0.0	-	-	-	-	-	-	-	-	-	-	0.0
88.4 29.7	-	5.1	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-
88.7 30.6	-	33.2	-	5.3	-	-	-	-	-	0.0	-	-	-	-	-

Table 6. (cont.)

<i>Parophrys vetulus</i> (cont.)												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.8 31.5	-	0.0	-	7.7	-	-	-	-	-	0.0	-	-
<i>Pleuronichthys coenosus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.4 32.7	0.0	-	-	0.0	-	-	-	-	-	-	9.1	-
86.5 32.4	0.0	-	-	6.2	-	-	-	-	-	-	0.0	-
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	2.3	-	-
88.7 30.6	-	0.0	-	5.3	-	-	-	-	-	5.2	-	-
88.8 31.5	-	0.0	-	7.7	-	-	-	-	-	0.0	-	-
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	2.5	-	-
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	5.5	-	-
<i>Pleuronichthys decurrens</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.3 33.4	4.1	-	-	0.0	-	-	-	-	-	-	0.0	-
<i>Pleuronichthys ritteri</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 38.9	5.9	-	-	2.5	-	-	-	-	-	-	-	0.0
84.3 39.1	0.0	-	-	5.9	-	-	-	-	-	-	-	0.0
84.3 39.4	0.0	-	-	2.8	-	-	-	-	-	-	-	0.0
86.4 32.7	0.0	-	-	0.0	-	-	-	-	-	-	27.2	-
86.5 32.1	0.0	-	-	18.9	-	-	-	-	-	-	1.3	-
86.5 32.3	0.0	-	-	49.7	-	-	-	-	-	-	2.2	-
86.5 32.4	0.0	-	-	34.1	-	-	-	-	-	-	58.2	-
88.4 29.7	-	5.1	-	25.0	-	-	-	-	-	22.4	-	-
88.5 29.3	-	8.9	-	19.3	-	-	-	-	-	85.8	-	-
88.6 30.2	-	3.3	-	2.1	-	-	-	-	-	97.2	-	-
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	43.9	-	-
88.8 31.5	-	0.0	-	0.0	-	-	-	-	-	6.7	-	-
91.0 26.6	-	0.0	-	4.2	-	-	-	-	-	10.8	-	-
91.0 26.8	-	0.0	-	0.0	-	-	-	-	-	28.1	-	-
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	30.0	-	-
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-

Table 6. (cont.)

Station	<i>Pleuronichthys verticalis</i>											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	0.0	-	-	4.8	-	-	-	-	-	-	-	0.0
84.3 38.9	0.0	-	-	14.8	-	-	-	-	-	-	-	0.0
84.3 39.1	0.0	-	-	38.2	-	-	-	-	-	-	-	0.0
84.3 39.4	0.0	-	-	30.5	-	-	-	-	-	-	-	0.0
84.3 39.6	0.0	-	-	43.7	-	-	-	-	-	-	-	0.0
86.3 33.4	8.2	-	-	64.9	-	-	-	-	-	-	0.0	-
86.4 32.7	0.0	-	-	15.2	-	-	-	-	-	-	12.1	-
86.5 32.1	0.0	-	-	13.5	-	-	-	-	-	-	0.0	-
86.5 32.3	0.0	-	-	74.5	-	-	-	-	-	-	2.2	-
86.5 32.4	0.0	-	-	31.0	-	-	-	-	-	-	14.6	-
88.4 29.7	-	1.7	-	4.2	-	-	-	-	-	0.0	-	-
88.5 29.3	-	3.0	-	27.6	-	-	-	-	-	0.0	-	-
88.6 30.2	-	16.3	-	2.1	-	-	-	-	-	0.0	-	-
88.7 30.6	-	0.0	-	2.7	-	-	-	-	-	2.6	-	-
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-
91.0 26.6	-	0.0	-	4.2	-	-	-	-	-	0.0	-	-
91.0 26.8	-	0.0	-	4.7	-	-	-	-	-	0.0	-	-
91.1 27.2	-	3.0	-	11.6	-	-	-	-	-	0.0	-	-
91.1 27.3	-	3.1	-	5.9	-	-	-	-	-	0.0	-	-
<i>Syphurus atricaudus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.4 29.7	-	0.0	-	0.0	-	-	-	-	-	17.9	-	-
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	92.8	-	-
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	34.2	-	-
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	149.6	-	-
88.8 31.5	-	0.0	-	0.0	-	-	-	-	-	2.2	-	-
91.0 26.8	-	0.0	-	0.0	-	-	-	-	-	5.6	-	-
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	7.5	-	-
Disintegrated fish eggs												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.6	0.0	-	-	2.7	-	-	-	-	-	-	-	4.6
86.5 32.1	0.0	-	-	10.8	-	-	-	-	-	-	0.0	-

Table 6. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	Disintegrated fish eggs (cont.)							
					May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.5 32.3	0.0	-	-	12.4	-	-	-	-	-	-	0.0	-
86.5 32.4	0.0	-	-	0.0	-	-	-	-	-	-	2.9	-
88.4 29.7	-	0.0	-	0.0	-	-	-	-	-	2.2	-	-
88.5 29.3	-	0.0	-	11.0	-	-	-	-	-	0.0	-	-
88.6 30.2	-	26.1	-	0.0	-	-	-	-	-	0.0	-	-
88.7 30.6	-	3.0	-	8.0	-	-	-	-	-	0.0	-	-
91.0 26.6	-	0.0	-	2.1	-	-	-	-	-	0.0	-	-
91.0 26.8	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	5.0	-	-
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-
Unidentified fish eggs												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 38.9	0.0	-	-	2.5	-	-	-	-	-	-	-	0.0
84.3 39.1	0.0	-	-	14.7	-	-	-	-	-	-	-	0.0
84.3 39.4	0.0	-	-	13.9	-	-	-	-	-	-	-	1.9
84.3 39.6	27.3	-	-	0.0	-	-	-	-	-	-	-	0.0
86.3 33.4	0.0	-	-	2.8	-	-	-	-	-	-	22.2	-
86.4 32.7	0.0	-	-	9.1	-	-	-	-	-	-	30.2	-
86.5 32.3	0.0	-	-	16.6	-	-	-	-	-	-	2.2	-
86.5 32.4	0.0	-	-	6.2	-	-	-	-	-	-	2.9	-
88.4 29.7	-	0.0	-	8.3	-	-	-	-	-	9.0	-	-
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	62.6	-	-
88.6 30.2	-	0.0	-	6.4	-	-	-	-	-	18.0	-	-
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	18.1	-	-
88.8 31.5	-	0.0	-	426.6	-	-	-	-	-	2.2	-	-
91.0 26.6	-	0.0	-	0.0	-	-	-	-	-	2.2	-	-
91.0 26.8	-	0.0	-	7.1	-	-	-	-	-	22.5	-	-
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	32.5	-	-
91.1 27.3	-	0.0	-	0.0	-	-	-	-	-	25.2	-	-

Table 7. Number of fish eggs taken in Bongo net tows at stations occupied on *La Mer* cruises in 2005. Counts are adjusted for standard haul factor (see text). Unoccupied stations are indicated by a dash.

<i>Sardinops sagax</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 38.9	-	0.0	-	1.9	-	-	0.0	-	-	-	-	-	
86.3 33.4	-	0.0	-	10.5	-	-	0.0	-	-	-	-	-	
88.4 29.7	0.0	-	-	7.0	-	0.0	-	-	-	-	-	-	
88.5 29.3	0.0	-	-	29.4	-	0.0	-	-	-	-	-	-	
88.6 30.2	0.0	-	-	14.5	-	0.0	-	-	-	-	-	-	
91.0 26.6	0.0	-	-	56.6	-	0.0	-	-	-	-	-	-	
91.0 26.8	0.0	-	-	81.9	-	0.0	-	-	-	-	-	-	
91.0 27.0	0.0	-	-	76.7	-	0.0	-	-	-	-	-	-	
91.1 27.2	7.4	-	-	32.4	-	0.0	-	-	-	-	-	-	
91.1 27.3	12.1	-	-	52.1	-	0.0	-	-	-	-	-	-	
<i>Engraulis mordax</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.2 38.8	-	0.0	-	2219.4	-	-	3.0	-	-	-	-	-	
84.3 38.9	-	0.0	-	7986.8	-	-	0.0	-	-	-	-	-	
84.3 39.1	-	0.0	-	9326.4	-	-	7.3	-	-	-	-	-	
84.3 39.4	-	0.0	-	17321.9	-	-	0.0	-	-	-	-	-	
84.3 39.6	-	0.0	-	19110.0	-	-	0.0	-	-	-	-	-	
86.3 33.4	-	0.0	-	5490.4	-	-	0.0	-	-	-	-	-	
86.4 32.7	-	18.8	-	14592.4	-	-	0.0	-	-	-	-	-	
86.5 32.3	-	0.0	-	200.0	-	-	5.2	-	-	-	-	-	
86.5 32.4	-	2.1	-	1048.8	-	-	3.6	-	-	-	-	-	
88.4 29.7	12.9	-	-	34.8	-	0.0	-	-	-	-	-	-	
88.5 29.3	36.8	-	-	1087.8	-	0.0	-	-	-	-	-	-	
88.6 30.2	316.2	-	-	8632.4	-	13.2	-	-	-	-	-	-	
88.7 30.6	2050.2	-	-	48951.0	-	28.3	-	-	-	-	-	-	
88.8 31.5	3174.4	-	-	17452.0	-	285.5	-	-	-	-	-	-	
91.0 26.6	8.0	-	-	8.1	-	4.4	-	-	-	-	-	-	
91.0 26.8	20.8	-	-	18.7	-	8.0	-	-	-	-	-	-	

Table 7. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Engraulis mordax</i> (cont.)							Oct.	Nov.	Dec.
					May	June	July	Aug.	Sep.					
91.0 27.0	27.0	160.6	-	-	207.3	-	10.4	-	-	-	-	-	-	-
91.1 27.2	27.2	8645.0	-	-	1177.2	-	88.8	-	-	-	-	-	-	-
91.1 27.3	27.3	8557.9	-	-	4358.4	-	250.5	-	-	-	-	-	-	-
<i>Argentina sialis</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
84.3 39.6	-	0.0	-	10.8	-	-	0.0	-	-	-	-	-	-	-
<i>Bathyolagus stibius</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
88.7 30.6	0.0	-	-	7.4	-	0.0	-	-	-	-	-	-	-	-
88.8 31.5	0.0	-	-	99.3	-	0.0	-	-	-	-	-	-	-	-
91.1 27.3	0.0	-	-	2.4	-	0.0	-	-	-	-	-	-	-	-
<i>Merluccius productus</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
84.3 39.1	-	0.0	-	26.8	-	-	0.0	-	-	-	-	-	-	-
84.3 39.6	-	0.0	-	54.2	-	-	0.0	-	-	-	-	-	-	-
88.8 31.5	0.0	-	-	33.1	-	0.0	-	-	-	-	-	-	-	-
91.1 27.2	2.5	-	-	0.0	-	0.0	-	-	-	-	-	-	-	-
91.1 27.3	0.0	-	-	4.7	-	0.0	-	-	-	-	-	-	-	-
<i>Ophidiidae</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
84.2 38.8	-	0.0	-	0.0	-	-	10.6	-	-	-	-	-	-	-
84.3 39.1	-	0.0	-	0.0	-	-	5.5	-	-	-	-	-	-	-
84.3 39.4	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-	-	-
86.5 32.3	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-	-	-
88.5 29.3	0.0	-	-	0.0	-	3.0	-	-	-	-	-	-	-	-
88.6 30.2	0.0	-	-	0.0	-	10.5	-	-	-	-	-	-	-	-
88.8 31.5	0.0	-	-	0.0	-	5.6	-	-	-	-	-	-	-	-
<i>Scorpaena</i> spp.														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
86.5 32.4	-	0.0	-	0.0	-	-	3.6	-	-	-	-	-	-	-

Table 7. (cont.)

Perciformes													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.4	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-	
88.7 30.6	0.0	-	-	0.0	-	44.5	-	-	-	-	-	-	
91.0 27.0	0.0	-	-	0.0	-	2.1	-	-	-	-	-	-	
91.1 27.2	0.0	-	-	0.0	-	36.2	-	-	-	-	-	-	
<i>Trachurus symmetricus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 38.9	-	0.0	-	5.6	-	-	0.0	-	-	-	-	-	
84.3 39.4	-	0.0	-	22.1	-	-	1.7	-	-	-	-	-	
88.6 30.2	0.0	-	-	20.2	-	0.0	-	-	-	-	-	-	
91.0 27.0	0.0	-	-	0.0	-	29.1	-	-	-	-	-	-	
91.1 27.2	0.0	-	-	0.0	-	29.6	-	-	-	-	-	-	
<i>Sciaenidae</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.1	-	0.0	-	0.0	-	-	18.2	-	-	-	-	-	
84.3 39.4	-	0.0	-	0.0	-	-	5.2	-	-	-	-	-	
84.3 39.6	-	0.0	-	0.0	-	-	3.9	-	-	-	-	-	
86.4 32.7	-	0.0	-	0.0	-	-	39.9	-	-	-	-	-	
86.5 32.1	-	0.0	-	0.0	-	-	52.8	-	-	-	-	-	
86.5 32.3	-	0.0	-	0.0	-	-	314.9	-	-	-	-	-	
86.5 32.4	-	0.0	-	0.0	-	-	202.9	-	-	-	-	-	
88.4 29.7	0.0	-	-	8.7	-	793.9	-	-	-	-	-	-	
88.5 29.3	0.0	-	-	0.0	-	9.0	-	-	-	-	-	-	
88.7 30.6	0.0	-	-	0.0	-	44.5	-	-	-	-	-	-	
91.0 26.6	0.0	-	-	0.0	-	85.8	-	-	-	-	-	-	
91.0 26.8	0.0	-	-	4.7	-	64.0	-	-	-	-	-	-	
91.0 27.0	0.0	-	-	17.0	-	79.0	-	-	-	-	-	-	
91.1 27.2	0.0	-	-	108.0	-	536.3	-	-	-	-	-	-	
91.1 27.3	0.0	-	-	40.3	-	250.5	-	-	-	-	-	-	
<i>Atractoscion nobilis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.5 32.3	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-	
88.6 30.2	0.0	-	-	0.0	-	5.3	-	-	-	-	-	-	

Table 7. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Atractoscincus nobilis</i> (cont.)							
					May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.7 30.6	0.0	-	-	0.0	-	4.0	-	-	-	-	-	-
88.8 31.5	0.0	-	-	0.0	-	28.0	-	-	-	-	-	-
91.1 27.3	0.0	-	-	2.4	-	0.0	-	-	-	-	-	-
<i>Genyonemus lineatus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	-	0.0	-	35.6	-	-	0.0	-	-	-	-	-
84.3 38.9	-	8.4	-	44.6	-	-	0.0	-	-	-	-	-
84.3 39.1	-	15.1	-	42.9	-	-	0.0	-	-	-	-	-
84.3 39.4	-	5.1	-	110.6	-	-	0.0	-	-	-	-	-
84.3 39.6	-	0.0	-	238.3	-	-	0.0	-	-	-	-	-
86.3 33.4	-	23.1	-	21.0	-	-	0.0	-	-	-	-	-
86.4 32.7	-	169.2	-	251.4	-	-	0.0	-	-	-	-	-
86.5 32.3	-	3.9	-	4.0	-	-	0.0	-	-	-	-	-
86.5 32.4	-	634.4	-	13.7	-	-	0.0	-	-	-	-	-
88.4 29.7	134.2	-	-	1.7	-	0.0	-	-	-	-	-	-
88.5 29.3	386.6	-	-	4.9	-	0.0	-	-	-	-	-	-
88.6 30.2	856.8	-	-	135.8	-	0.0	-	-	-	-	-	-
88.7 30.6	412.7	-	-	426.3	-	0.0	-	-	-	-	-	-
88.8 31.5	0.0	-	-	63.2	-	0.0	-	-	-	-	-	-
91.0 26.6	60.3	-	-	4.0	-	0.0	-	-	-	-	-	-
91.0 26.8	332.8	-	-	14.0	-	0.0	-	-	-	-	-	-
91.0 27.0	729.2	-	-	122.1	-	0.0	-	-	-	-	-	-
91.1 27.2	1326.4	-	-	326.7	-	0.0	-	-	-	-	-	-
91.1 27.3	332.6	-	-	900.6	-	0.0	-	-	-	-	-	-
<i>Oxyjulis californica</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.1	-	0.0	-	0.0	-	-	14.6	-	-	-	-	-
84.3 39.4	-	0.0	-	33.2	-	-	8.6	-	-	-	-	-
86.3 33.4	-	0.0	-	0.0	-	-	2.1	-	-	-	-	-
86.4 32.7	-	0.0	-	0.0	-	-	19.0	-	-	-	-	-
88.4 29.7	0.0	-	-	0.0	-	91.7	-	-	-	-	-	-

Table 7. (cont.)

<i>Oxyjulis californica</i> (cont.)												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.5 29.3	0.0	-	-	0.0	-	77.7	-	-	-	-	-	-
88.6 30.2	0.0	-	-	0.0	-	384.0	-	-	-	-	-	-
88.7 30.6	0.0	-	-	0.0	-	557.7	-	-	-	-	-	-
91.0 26.6	0.0	-	-	0.0	-	6.6	-	-	-	-	-	-
91.0 26.8	0.0	-	-	0.0	-	184.0	-	-	-	-	-	-
91.0 27.0	0.0	-	-	0.0	-	191.4	-	-	-	-	-	-
91.1 27.2	0.0	-	-	0.0	-	62.5	-	-	-	-	-	-
91.1 27.3	0.0	-	-	0.0	-	121.5	-	-	-	-	-	-
<i>Semicossyphus pulcher</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.1	-	0.0	-	0.0	-	-	3.6	-	-	-	-	-
84.3 39.4	-	0.0	-	0.0	-	-	3.4	-	-	-	-	-
86.5 32.1	-	0.0	-	0.0	-	-	3.3	-	-	-	-	-
86.5 32.3	-	0.0	-	0.0	-	-	22.5	-	-	-	-	-
86.5 32.4	-	0.0	-	0.0	-	-	160.2	-	-	-	-	-
91.0 26.8	0.0	-	-	0.0	-	10.0	-	-	-	-	-	-
91.0 27.0	0.0	-	-	0.0	-	2.1	-	-	-	-	-	-
91.1 27.2	0.0	-	-	0.0	-	6.6	-	-	-	-	-	-
91.1 27.3	0.0	-	-	0.0	-	7.4	-	-	-	-	-	-
<i>Icosteus aenigmaticus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.8 31.5	5.0	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Sphyraena argentea</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.7 30.6	0.0	-	-	0.0	-	40.4	-	-	-	-	-	-
91.1 27.3	0.0	-	-	0.0	-	24.8	-	-	-	-	-	-
<i>Scomber japonicus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.4 32.7	-	0.0	-	12.6	-	-	0.0	-	-	-	-	-
88.6 30.2	0.0	-	-	11.6	-	13.2	-	-	-	-	-	-
88.7 30.6	0.0	-	-	0.0	-	88.9	-	-	-	-	-	-

Table 7. (cont.)

<i>Scomber japonicus</i> (cont.)												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.1 27.3	0.0	-	-	14.2	-	0.0	-	-	-	-	-	-
<i>Tetragonurus cuvieri</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.6	-	0.0	-	10.8	-	-	0.0	-	-	-	-	-
<i>Pleuronectiformes</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.1	-	74.0	-	0.0	-	-	0.0	-	-	-	-	-
86.5 32.1	-	22.2	-	0.0	-	-	0.0	-	-	-	-	-
88.4 29.7	118.7	-	-	0.0	-	0.0	-	-	-	-	-	-
88.5 29.3	136.8	-	-	0.0	-	0.0	-	-	-	-	-	-
88.6 30.2	222.4	-	-	0.0	-	0.0	-	-	-	-	-	-
88.7 30.6	26.8	-	-	0.0	-	0.0	-	-	-	-	-	-
91.0 26.6	16.1	-	-	0.0	-	0.0	-	-	-	-	-	-
91.0 26.8	54.6	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Citharichthys spp.</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	-	0.0	-	0.0	-	-	3.0	-	-	-	-	-
84.3 38.9	-	0.0	-	0.0	-	-	2.5	-	-	-	-	-
84.3 39.1	-	0.0	-	0.0	-	-	5.5	-	-	-	-	-
84.3 39.4	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-
88.6 30.2	0.0	-	-	2.9	-	0.0	-	-	-	-	-	-
<i>Citharichthys sordidus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.4	-	0.0	-	11.1	-	-	0.0	-	-	-	-	-
91.1 27.2	2.5	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Citharichthys stigmaeus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	-	0.0	-	72.9	-	-	179.4	-	-	-	-	-
84.3 38.9	-	7.0	-	122.8	-	-	78.1	-	-	-	-	-
84.3 39.1	-	1.4	-	32.2	-	-	85.5	-	-	-	-	-
84.3 39.4	-	1.7	-	11.1	-	-	103.2	-	-	-	-	-
84.3 39.6	-	0.0	-	119.2	-	-	11.7	-	-	-	-	-

Table 7. (cont.)

Citharichthys stigmaeus (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.3 33.4	-	0.0	-	0.0	-	-	2.1	-	-	-	-	-
86.4 32.7	-	33.8	-	113.1	-	-	125.4	-	-	-	-	-
86.5 32.1	-	72.2	-	23.4	-	-	2117.0	-	-	-	-	-
86.5 32.3	-	27.0	-	114.0	-	-	666.1	-	-	-	-	-
86.5 32.4	-	68.6	-	141.4	-	-	1044.9	-	-	-	-	-
88.4 29.7	5.2	-	-	22.6	-	47.2	-	-	-	-	-	-
88.5 29.3	10.5	-	-	4.9	-	236.2	-	-	-	-	-	-
88.6 30.2	102.0	-	-	49.1	-	678.5	-	-	-	-	-	-
88.7 30.6	16.1	-	-	7.4	-	88.9	-	-	-	-	-	-
88.8 31.5	0.0	-	-	3.0	-	5.6	-	-	-	-	-	-
91.0 26.6	0.0	-	-	34.3	-	51.7	-	-	-	-	-	-
91.0 26.8	2.6	-	-	51.5	-	192.0	-	-	-	-	-	-
91.0 27.0	35.7	-	-	73.8	-	445.1	-	-	-	-	-	-
91.1 27.2	29.6	-	-	189.0	-	55.9	-	-	-	-	-	-
91.1 27.3	0.0	-	-	56.9	-	37.2	-	-	-	-	-	-

Hippoglossina stomata

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.6	-	0.0	-	0.0	-	-	3.9	-	-	-	-	-
86.3 33.4	-	0.0	-	0.0	-	-	6.4	-	-	-	-	-
86.4 32.7	-	0.0	-	0.0	-	-	5.7	-	-	-	-	-
86.5 32.4	-	0.0	-	0.0	-	-	5.3	-	-	-	-	-
88.6 30.2	2.0	-	-	0.0	-	0.0	-	-	-	-	-	-
88.7 30.6	0.0	-	-	7.4	-	0.0	-	-	-	-	-	-
88.8 31.5	0.0	-	-	3.0	-	0.0	-	-	-	-	-	-
91.0 26.8	0.0	-	-	0.0	-	2.0	-	-	-	-	-	-
91.1 27.3	0.0	-	-	4.7	-	0.0	-	-	-	-	-	-

Paralichthys californicus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	-	6.7	-	11.3	-	-	31.9	-	-	-	-	-
84.3 38.9	-	35.0	-	31.6	-	-	22.3	-	-	-	-	-
84.3 39.1	-	0.0	-	123.3	-	-	14.6	-	-	-	-	-
84.3 39.4	-	3.4	-	0.0	-	-	46.4	-	-	-	-	-

Table 7. (cont.)

<i>Paralichthys californicus</i> (cont.)													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	-	0.0	-	119.2	-	-	89.9	-	-	-	-	-	
86.3 33.4	-	25.4	-	31.6	-	-	203.3	-	-	-	-	-	
86.4 32.7	-	47.0	-	88.0	-	-	174.8	-	-	-	-	-	
86.5 32.1	-	0.0	-	2.0	-	-	67.7	-	-	-	-	-	
86.5 32.3	-	0.0	-	18.0	-	-	45.0	-	-	-	-	-	
86.5 32.4	-	249.6	-	29.6	-	-	137.1	-	-	-	-	-	
88.4 29.7	0.0	-	-	17.4	-	0.0	-	-	-	-	-	-	
88.5 29.3	0.0	-	-	17.2	-	0.0	-	-	-	-	-	-	
88.6 30.2	0.0	-	-	8.7	-	0.0	-	-	-	-	-	-	
88.7 30.6	0.0	-	-	12.3	-	0.0	-	-	-	-	-	-	
88.8 31.5	0.0	-	-	21.1	-	0.0	-	-	-	-	-	-	
91.0 26.6	0.0	-	-	54.5	-	19.8	-	-	-	-	-	-	
91.0 26.8	0.0	-	-	88.9	-	206.0	-	-	-	-	-	-	
91.0 27.0	254.2	-	-	110.8	-	91.5	-	-	-	-	-	-	
91.1 27.2	205.0	-	-	86.4	-	0.0	-	-	-	-	-	-	
91.1 27.3	55.4	-	-	279.7	-	0.0	-	-	-	-	-	-	
<i>Glyptocephalus zachirus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.3 33.4	-	0.0	-	31.6	-	-	0.0	-	-	-	-	-	
86.4 32.7	-	0.0	-	50.3	-	-	0.0	-	-	-	-	-	
<i>Lyopsetta exilis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	-	0.0	-	10.8	-	-	0.0	-	-	-	-	-	
86.3 33.4	-	0.0	-	10.5	-	-	0.0	-	-	-	-	-	
91.1 27.2	0.0	-	-	2.7	-	0.0	-	-	-	-	-	-	
91.1 27.3	0.0	-	-	35.6	-	0.0	-	-	-	-	-	-	
<i>Microstomus pacificus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.1 27.3	0.0	-	-	2.4	-	0.0	-	-	-	-	-	-	
<i>Parophrys vetulus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 38.9	-	0.0	-	1.9	-	-	0.0	-	-	-	-	-	

Table 7. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Parophrys vetulus</i> (cont.)							
					May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.1	-	0.0	-	21.4	-	-	0.0	-	-	-	-	-
84.3 39.4	-	0.0	-	22.1	-	-	0.0	-	-	-	-	-
84.3 39.6	-	0.0	-	97.5	-	-	0.0	-	-	-	-	-
86.3 33.4	-	6.9	-	31.6	-	-	0.0	-	-	-	-	-
86.4 32.7	-	0.0	-	12.6	-	-	0.0	-	-	-	-	-
88.7 30.6	0.0	-	-	76.0	-	0.0	-	-	-	-	-	-
91.0 27.0	0.0	-	-	2.8	-	0.0	-	-	-	-	-	-
91.1 27.2	0.0	-	-	10.8	-	0.0	-	-	-	-	-	-
91.1 27.3	0.0	-	-	21.3	-	5.0	-	-	-	-	-	-
<i>Pleuronichthys coenosus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.5 32.4	-	0.0	-	0.0	-	-	1.8	-	-	-	-	-
88.7 30.6	0.0	-	-	0.0	-	4.0	-	-	-	-	-	-
91.1 27.3	0.0	-	-	0.0	-	2.5	-	-	-	-	-	-
<i>Pleuronichthys ritteri</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.5 32.1	-	0.0	-	0.0	-	-	3.3	-	-	-	-	-
86.5 32.3	-	0.0	-	0.0	-	-	3.5	-	-	-	-	-
86.5 32.4	-	0.0	-	0.0	-	-	10.7	-	-	-	-	-
88.4 29.7	2.6	-	-	0.0	-	0.0	-	-	-	-	-	-
88.5 29.3	10.5	-	-	0.0	-	0.0	-	-	-	-	-	-
88.6 30.2	2.0	-	-	0.0	-	0.0	-	-	-	-	-	-
91.0 26.6	0.0	-	-	2.0	-	0.0	-	-	-	-	-	-
91.0 26.8	0.0	-	-	0.0	-	2.0	-	-	-	-	-	-
91.0 27.0	0.0	-	-	2.8	-	2.1	-	-	-	-	-	-
<i>Pleuronichthys verticalis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	-	0.0	-	3.2	-	-	0.0	-	-	-	-	-
84.3 38.9	-	1.4	-	9.3	-	-	2.5	-	-	-	-	-
84.3 39.1	-	6.9	-	16.1	-	-	0.0	-	-	-	-	-
84.3 39.4	-	0.0	-	44.2	-	-	0.0	-	-	-	-	-
84.3 39.6	-	0.0	-	10.8	-	-	7.8	-	-	-	-	-

Table 7. (cont.)

Pleuronichthys verticalis (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.3 33.4	-	0.0	-	10.5	-	-	23.5	-	-	-	-	-
86.4 32.7	-	0.0	-	37.7	-	-	17.1	-	-	-	-	-
86.5 32.1	-	0.0	-	0.0	-	-	6.6	-	-	-	-	-
86.5 32.3	-	0.0	-	2.0	-	-	20.8	-	-	-	-	-
86.5 32.4	-	6.2	-	4.6	-	-	64.1	-	-	-	-	-
88.4 29.7	0.0	-	-	0.0	-	2.6	-	-	-	-	-	-
88.5 29.3	0.0	-	-	0.0	-	6.0	-	-	-	-	-	-
88.6 30.2	8.2	-	-	8.7	-	23.7	-	-	-	-	-	-
88.7 30.6	2.7	-	-	2.5	-	8.1	-	-	-	-	-	-
91.0 26.6	0.0	-	-	0.0	-	6.6	-	-	-	-	-	-
91.0 26.8	0.0	-	-	4.7	-	28.0	-	-	-	-	-	-
91.0 27.0	2.2	-	-	8.5	-	43.7	-	-	-	-	-	-
91.1 27.2	7.4	-	-	18.9	-	29.6	-	-	-	-	-	-
91.1 27.3	7.2	-	-	61.6	-	14.9	-	-	-	-	-	-
<i>Syphurus atricaudus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.3 33.4	-	0.0	-	0.0	-	-	6.4	-	-	-	-	-
86.4 32.7	-	0.0	-	0.0	-	-	24.7	-	-	-	-	-
91.0 26.8	0.0	-	-	14.0	-	16.0	-	-	-	-	-	-
91.0 27.0	0.0	-	-	0.0	-	4.2	-	-	-	-	-	-
91.1 27.2	0.0	-	-	0.0	-	9.9	-	-	-	-	-	-
91.1 27.3	0.0	-	-	0.0	-	67.0	-	-	-	-	-	-
Disintegrated fish eggs												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 38.9	-	0.0	-	1.9	-	-	0.0	-	-	-	-	-
86.4 32.7	-	0.0	-	0.0	-	-	5.7	-	-	-	-	-
86.5 32.3	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-
86.5 32.4	-	4.2	-	2.3	-	-	1.8	-	-	-	-	-
88.4 29.7	0.0	-	-	0.0	-	2.6	-	-	-	-	-	-
88.6 30.2	2.0	-	-	0.0	-	0.0	-	-	-	-	-	-
88.7 30.6	2.7	-	-	0.0	-	0.0	-	-	-	-	-	-
88.8 31.5	2.5	-	-	3.0	-	0.0	-	-	-	-	-	-

Table 7. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	Disintegrated fish eggs (cont.)							
					May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.0 26.6	0.0	-	-	2.0	-	0.0	-	-	-	-	-	-
91.0 26.8	0.0	-	-	4.7	-	8.0	-	-	-	-	-	-
91.0 27.0	0.0	-	-	0.0	-	12.5	-	-	-	-	-	-
91.1 27.2	0.0	-	-	8.1	-	3.3	-	-	-	-	-	-
91.1 27.3	0.0	-	-	7.1	-	2.5	-	-	-	-	-	-
Unidentified fish eggs												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	-	0.0	-	0.0	-	-	6.1	-	-	-	-	-
84.3 38.9	-	0.0	-	0.0	-	-	1.2	-	-	-	-	-
84.3 39.1	-	0.0	-	0.0	-	-	3.6	-	-	-	-	-
84.3 39.6	-	0.0	-	0.0	-	-	7.8	-	-	-	-	-
86.3 33.4	-	0.0	-	10.5	-	-	8.6	-	-	-	-	-
86.4 32.7	-	1.9	-	0.0	-	-	24.7	-	-	-	-	-
86.5 32.1	-	0.0	-	0.0	-	-	181.5	-	-	-	-	-
86.5 32.3	-	0.0	-	0.0	-	-	41.5	-	-	-	-	-
86.5 32.4	-	0.0	-	0.0	-	-	48.1	-	-	-	-	-
88.4 29.7	0.0	-	-	1.7	-	39.3	-	-	-	-	-	-
88.5 29.3	0.0	-	-	0.0	-	29.9	-	-	-	-	-	-
88.6 30.2	0.0	-	-	5.8	-	7.9	-	-	-	-	-	-
88.7 30.6	0.0	-	-	159.3	-	32.3	-	-	-	-	-	-
88.8 31.5	9.9	-	-	6.0	-	61.6	-	-	-	-	-	-
91.0 26.6	0.0	-	-	0.0	-	6.6	-	-	-	-	-	-
91.0 26.8	0.0	-	-	7.0	-	20.0	-	-	-	-	-	-
91.0 27.0	0.0	-	-	0.0	-	2.1	-	-	-	-	-	-
91.1 27.2	0.0	-	-	8.1	-	19.7	-	-	-	-	-	-
91.1 27.3	0.0	-	-	14.2	-	49.6	-	-	-	-	-	-

Table 8. Number of fish larvae taken in Bongo net tows at stations occupied on *La Mer* cruises in 2004. Counts are adjusted for standard haul factor (see text). Unoccupied stations are indicated by a dash.

<i>Sardinops sagax</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	7.0	-	-
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	10.8	-	-
88.7 30.6	-	0.0	-	2.7	-	-	-	-	-	5.2	-	-
88.8 31.5	-	0.0	-	18.0	-	-	-	-	-	2.2	-	-
91.0 26.6	-	0.0	-	0.0	-	-	-	-	-	2.2	-	-
91.1 27.3	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-
<i>Engraulis mordax</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.1	0.0	-	-	2.9	-	-	-	-	-	-	-	0.0
84.3 39.4	0.0	-	-	0.0	-	-	-	-	-	-	-	1.9
86.3 33.4	0.0	-	-	14.1	-	-	-	-	-	-	4.4	-
86.4 32.7	0.0	-	-	36.4	-	-	-	-	-	-	9.1	-
86.5 32.3	0.0	-	-	8.3	-	-	-	-	-	-	0.0	-
86.5 32.4	0.0	-	-	34.1	-	-	-	-	-	-	0.0	-
88.4 29.7	-	0.0	-	0.0	-	-	-	-	-	9.0	-	-
88.5 29.3	-	0.0	-	24.8	-	-	-	-	-	23.2	-	-
88.6 30.2	-	0.0	-	214.1	-	-	-	-	-	30.6	-	-
88.7 30.6	-	0.0	-	352.5	-	-	-	-	-	28.4	-	-
88.8 31.5	-	0.0	-	894.4	-	-	-	-	-	13.4	-	-
91.0 26.8	-	0.0	-	4.7	-	-	-	-	-	8.4	-	-
91.0 27.0	-	0.0	-	15.0	-	-	-	-	-	5.0	-	-
91.1 27.2	-	0.0	-	75.7	-	-	-	-	-	13.8	-	-
91.1 27.3	-	47.0	-	520.4	-	-	-	-	-	2.8	-	-
<i>Argentina sialis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.1 27.3	-	3.1	-	0.0	-	-	-	-	-	0.0	-	-
<i>Bathylagus pacificus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.8 31.5	-	3.3	-	0.0	-	-	-	-	-	0.0	-	-

Table 8. (cont.)

<i>Bathylags stilbius</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	0.0	-	-	5.5	-	-	-	-	-	-	-	0.0	
88.8 31.5	-	52.8	-	0.0	-	-	-	-	-	0.0	-	-	
91.1 27.3	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-	
<i>Lipolagus ochotensis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	0.0	-	-	5.5	-	-	-	-	-	-	-	0.0	
86.3 33.4	0.0	-	-	2.8	-	-	-	-	-	-	0.0	-	
88.8 31.5	-	9.9	-	0.0	-	-	-	-	-	0.0	-	-	
91.1 27.3	-	31.3	-	0.0	-	-	-	-	-	0.0	-	-	
<i>Cyclothona signata</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.1 27.3	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-	
<i>Stenobrachius leucopsarus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	6.8	-	-	10.9	-	-	-	-	-	-	-	0.0	
86.3 33.4	0.0	-	-	22.6	-	-	-	-	-	-	0.0	-	
88.6 30.2	-	3.3	-	0.0	-	-	-	-	-	0.0	-	-	
88.7 30.6	-	3.0	-	2.7	-	-	-	-	-	0.0	-	-	
88.8 31.5	-	39.6	-	23.1	-	-	-	-	-	0.0	-	-	
91.1 27.2	-	5.9	-	0.0	-	-	-	-	-	0.0	-	-	
91.1 27.3	-	165.9	-	11.8	-	-	-	-	-	0.0	-	-	
<i>Triphoturus mexicanus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	1.8	-	-	
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	2.6	-	-	
91.1 27.3	-	0.0	-	0.0	-	-	-	-	-	8.4	-	-	
<i>Protomyctophum crockeri</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	-	3.3	-	0.0	-	-	-	-	-	0.0	-	-	
<i>Tarletonbeania crenularis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.1 27.3	-	3.1	-	0.0	-	-	-	-	-	0.0	-	-	

Table 8. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Merluccius productus</i>							Oct.	Nov.	Dec.
					May	June	July	Aug.	Sep.					
84.3 39.1	0.0	-	-	2.9	-	-	-	-	-	-	-	-	-	0.0
84.3 39.4	4.9	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0
84.3 39.6	0.0	-	-	5.5	-	-	-	-	-	-	-	-	-	2.3
86.3 33.4	8.2	-	-	14.1	-	-	-	-	-	-	-	-	0.0	-
88.8 31.5	-	29.7	-	0.0	-	-	-	-	-	-	0.0	-	-	-
91.1 27.3	-	21.9	-	2.9	-	-	-	-	-	-	0.0	-	-	-
<i>Chilara taylori</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	5.5	-	-		
<i>Ophidion scrippsae</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
91.0 27.0	-	0.0	-	0.0	-	-	-	-	-	2.5	-	-		
<i>Atherinopsis californiensis</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
86.4 32.7	5.0	-	-	0.0	-	-	-	-	-	-	0.0	-		
<i>Sebastes spp.</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
84.3 39.1	0.0	-	-	0.0	-	-	-	-	-	-	-	3.3		
84.3 39.4	9.7	-	-	2.8	-	-	-	-	-	-	-	5.8		
84.3 39.6	0.0	-	-	13.7	-	-	-	-	-	-	-	32.1		
86.3 33.4	110.4	-	-	95.9	-	-	-	-	-	-	-	26.6	-	
86.4 32.7	0.0	-	-	3.0	-	-	-	-	-	-	-	3.0	-	
88.7 30.6	-	0.0	-	2.7	-	-	-	-	-	0.0	-	-		
88.8 31.5	-	85.8	-	15.4	-	-	-	-	-	2.2	-	-		
91.1 27.3	-	72.0	-	0.0	-	-	-	-	-	8.4	-	-		
<i>Sebastes aurora</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
84.3 39.6	0.0	-	-	2.7	-	-	-	-	-	-	-	0.0		
<i>Sebastes diploproa</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
88.8 31.5	-	0.0	-	0.0	-	-	-	-	-	4.5	-	-		

Table 8. (cont.)

<i>Sebastes jordani</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	0.0	-	-	2.7	-	-	-	-	-	-	-	0.0	
86.3 33.4	0.0	-	-	2.8	-	-	-	-	-	-	0.0	-	
88.8 31.5	-	3.3	-	0.0	-	-	-	-	-	0.0	-	-	
<i>Sebastes levis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	-	3.3	-	0.0	-	-	-	-	-	0.0	-	-	
91.1 27.3	-	3.1	-	0.0	-	-	-	-	-	0.0	-	-	
<i>Zaniolepis frenata</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-	
<i>Leptocottus armatus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 38.9	0.0	-	-	2.5	-	-	-	-	-	-	-	0.0	
<i>Scorpaenichthys marmoratus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.4 32.7	0.0	-	-	3.0	-	-	-	-	-	-	0.0	-	
<i>Bathyagonus pentacanthus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	0.0	-	-	2.7	-	-	-	-	-	-	-	0.0	
<i>Paralabrax spp.</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	2.6	-	-	
<i>Anisotremus davidsoni</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	3.6	-	-	
<i>Sciaenidae</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.4 29.7	-	0.0	-	0.0	-	-	-	-	-	2.2	-	-	
<i>Atractoscion nobilis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-	
91.0 27.0	-	0.0	-	3.0	-	-	-	-	-	0.0	-	-	

Table 8. (cont.)

<i>Genyonemus lineatus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 38.9	0.0	-	-	4.9	-	-	-	-	-	-	-	0.0
86.4 32.7	0.0	-	-	9.1	-	-	-	-	-	-	9.1	-
86.5 32.3	0.0	-	-	8.3	-	-	-	-	-	-	8.9	-
86.5 32.4	0.0	-	-	0.0	-	-	-	-	-	-	14.6	-
88.4 29.7	-	1.7	-	0.0	-	-	-	-	-	0.0	-	-
88.5 29.3	-	0.0	-	8.3	-	-	-	-	-	7.0	-	-
88.6 30.2	-	3.3	-	6.4	-	-	-	-	-	0.0	-	-
88.7 30.6	-	0.0	-	8.0	-	-	-	-	-	0.0	-	-
88.8 31.5	-	0.0	-	10.3	-	-	-	-	-	0.0	-	-
91.1 27.2	-	0.0	-	29.1	-	-	-	-	-	0.0	-	-
91.1 27.3	-	0.0	-	14.7	-	-	-	-	-	0.0	-	-
<i>Menticirrhus undulatus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	2.3	-	-
91.0 26.8	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-
91.1 27.3	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
<i>Roncador stearnsii</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.6 30.2	-	0.0	-	4.2	-	-	-	-	-	0.0	-	-
<i>Seriphus politus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.7 30.6	-	0.0	-	5.3	-	-	-	-	-	0.0	-	-
91.1 27.2	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
<i>Girella nigricans</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	1.8	-	-
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	5.2	-	-
<i>Hermosilla azurea</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	4.6	-	-
<i>Chromis punctipinnis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.1 27.3	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-

Table 8. (cont.)

<i>Oxyjulis californica</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	4.5	-	-	
<i>Gibbonsia</i> spp.													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.0 26.6	-	2.4	-	0.0	-	-	-	-	-	0.0	-	-	
<i>Hypsoblennius</i> spp.													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.5 29.3	-	0.0	-	2.8	-	-	-	-	-	0.0	-	-	
91.0 27.0	-	0.0	-	3.0	-	-	-	-	-	0.0	-	-	
<i>Hypsoblennius gilberti</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.4 32.7	0.0	-	-	3.0	-	-	-	-	-	-	0.0	-	
91.1 27.3	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-	
<i>Hypsoblennius jenkinsi</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.5 32.4	0.0	-	-	0.0	-	-	-	-	-	-	2.9	-	
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	7.0	-	-	
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	3.6	-	-	
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	5.2	-	-	
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-	
<i>Clevelandia ios</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.5 32.1	2.0	-	-	0.0	-	-	-	-	-	-	0.0	-	
<i>Gillichthys mirabilis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.4 29.7	-	1.7	-	0.0	-	-	-	-	-	0.0	-	-	
<i>Ilypnus gilberti</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.4 29.7	-	18.6	-	0.0	-	-	-	-	-	9.0	-	-	
<i>Lepidogobius lepidus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.4 32.7	0.0	-	-	0.0	-	-	-	-	-	-	24.2	-	
86.5 32.3	0.0	-	-	4.1	-	-	-	-	-	-	0.0	-	
88.4 29.7	-	3.4	-	0.0	-	-	-	-	-	0.0	-	-	

Table 8. (cont.)

<i>Lepidogobius lepidus</i> (cont.)												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	5.2	-	-
91.1 27.3	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
<i>Lythrypnus dalli</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-
<i>Rhinogobiops nicholsii</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.1	0.0	-	-	0.0	-	-	-	-	-	-	-	1.7
84.3 39.4	0.0	-	-	0.0	-	-	-	-	-	-	-	7.8
86.3 33.4	0.0	-	-	2.8	-	-	-	-	-	-	0.0	-
88.8 31.5	-	0.0	-	7.7	-	-	-	-	-	6.7	-	-
91.1 27.3	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
<i>Typhlogobius californiensis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-
91.0 26.6	-	0.0	-	10.5	-	-	-	-	-	0.0	-	-
91.0 26.8	-	0.0	-	2.4	-	-	-	-	-	0.0	-	-
91.1 27.3	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
<i>Peprilus simillimus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.7 30.6	-	0.0	-	15.9	-	-	-	-	-	0.0	-	-
88.8 31.5	-	0.0	-	7.7	-	-	-	-	-	0.0	-	-
91.1 27.2	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
91.1 27.3	-	0.0	-	8.8	-	-	-	-	-	0.0	-	-
<i>Citharichthys</i> spp.												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.6	6.8	-	-	0.0	-	-	-	-	-	-	-	0.0
86.3 33.4	0.0	-	-	5.6	-	-	-	-	-	-	0.0	-
86.4 32.7	0.0	-	-	0.0	-	-	-	-	-	-	3.0	-
88.8 31.5	-	6.6	-	5.1	-	-	-	-	-	0.0	-	-
91.1 27.3	-	9.4	-	0.0	-	-	-	-	-	0.0	-	-

Table 8. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Citharichthys sordidus</i>							Oct.	Nov.	Dec.
					May	June	July	Aug.	Sep.					
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	1.8	-	-		
88.8 31.5	-	0.0	-	0.0	-	-	-	-	-	2.2	-	-		
<i>Citharichthys stigmaeus</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
86.3 33.4	0.0	-	-	5.6	-	-	-	-	-	-	0.0	-		
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	4.6	-	-		
88.7 30.6	-	3.0	-	2.7	-	-	-	-	-	5.2	-	-		
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	2.2	-	-		
91.1 27.2	-	0.0	-	0.0	-	-	-	-	-	2.8	-	-		
91.1 27.3	-	0.0	-	14.7	-	-	-	-	-	2.8	-	-		
<i>Paralichthys californicus</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
84.3 39.1	0.0	-	-	2.9	-	-	-	-	-	-	-	0.0		
84.3 39.6	0.0	-	-	2.7	-	-	-	-	-	-	-	0.0		
86.4 32.7	0.0	-	-	6.1	-	-	-	-	-	-	0.0	-		
86.5 32.4	0.0	-	-	0.0	-	-	-	-	-	-	2.9	-		
88.5 29.3	-	0.0	-	0.0	-	-	-	-	-	4.6	-	-		
88.6 30.2	-	3.3	-	31.8	-	-	-	-	-	5.4	-	-		
88.7 30.6	-	0.0	-	21.2	-	-	-	-	-	0.0	-	-		
88.8 31.5	-	0.0	-	10.3	-	-	-	-	-	0.0	-	-		
91.0 26.8	-	0.0	-	11.8	-	-	-	-	-	2.8	-	-		
91.0 27.0	-	0.0	-	60.0	-	-	-	-	-	0.0	-	-		
91.1 27.2	-	0.0	-	87.3	-	-	-	-	-	0.0	-	-		
91.1 27.3	-	0.0	-	5.9	-	-	-	-	-	0.0	-	-		
<i>Hypsopsetta guttulata</i>														
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		
84.3 38.9	5.9	-	-	0.0	-	-	-	-	-	-	-	0.0		
88.4 29.7	-	0.0	-	2.1	-	-	-	-	-	0.0	-	-		
88.6 30.2	-	0.0	-	2.1	-	-	-	-	-	1.8	-	-		
91.0 26.8	-	0.0	-	2.4	-	-	-	-	-	0.0	-	-		
91.0 27.0	-	0.0	-	15.0	-	-	-	-	-	0.0	-	-		

Table 8. (cont.)

<i>Lyopsetta exilis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.6	0.0	-	-	2.7	-	-	-	-	-	-	-	0.0
86.3 33.4	0.0	-	-	11.3	-	-	-	-	-	-	0.0	-
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-
<i>Parophrys vetulus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.3 33.4	4.1	-	-	0.0	-	-	-	-	-	-	0.0	-
86.4 32.7	0.0	-	-	6.1	-	-	-	-	-	-	0.0	-
88.7 30.6	-	6.0	-	0.0	-	-	-	-	-	0.0	-	-
91.1 27.3	-	6.3	-	0.0	-	-	-	-	-	0.0	-	-
<i>Pleuronichthys decurrens</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.8 31.5	-	0.0	-	2.6	-	-	-	-	-	0.0	-	-
<i>Pleuronichthys ritteri</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.4 32.7	0.0	-	-	6.1	-	-	-	-	-	-	3.0	-
86.5 32.4	0.0	-	-	0.0	-	-	-	-	-	-	2.9	-
88.6 30.2	-	0.0	-	0.0	-	-	-	-	-	3.6	-	-
91.1 27.2	-	0.0	-	2.9	-	-	-	-	-	0.0	-	-
<i>Pleuronichthys verticalis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.4	0.0	-	-	2.8	-	-	-	-	-	-	-	0.0
86.5 32.4	0.0	-	-	0.0	-	-	-	-	-	-	2.9	-
88.7 30.6	-	0.0	-	0.0	-	-	-	-	-	2.6	-	-
88.8 31.5	-	3.3	-	5.1	-	-	-	-	-	0.0	-	-
91.1 27.2	-	0.0	-	5.8	-	-	-	-	-	0.0	-	-
<i>Disintegrated fish larvae</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.6 30.2	-	0.0	-	2.1	-	-	-	-	-	0.0	-	-
88.7 30.6	-	0.0	-	5.3	-	-	-	-	-	0.0	-	-

Table 9. Number of fish larvae taken in Bongo net tows at stations occupied on *La Mer* cruises in 2005. Counts are adjusted for standard haul factor (see text). Unoccupied stations are indicated by a dash.

<i>Sardinops sagax</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.1	-	0.0	-	5.4	-	-	0.0	-	-	-	-	-	
88.8 31.5	0.0	-	-	6.0	-	0.0	-	-	-	-	-	-	
91.1 27.3	0.0	-	-	7.1	-	0.0	-	-	-	-	-	-	
<i>Engraulis mordax</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.2 38.8	-	4.2	-	1.6	-	-	0.0	-	-	-	-	-	
84.3 38.9	-	16.8	-	42.8	-	-	0.0	-	-	-	-	-	
84.3 39.1	-	78.1	-	343.0	-	-	0.0	-	-	-	-	-	
84.3 39.4	-	16.9	-	752.2	-	-	0.0	-	-	-	-	-	
84.3 39.6	-	3.7	-	433.3	-	-	0.0	-	-	-	-	-	
86.3 33.4	-	23.1	-	3912.7	-	-	0.0	-	-	-	-	-	
86.4 32.7	-	18.8	-	364.5	-	-	0.0	-	-	-	-	-	
86.5 32.3	-	9.7	-	0.0	-	-	0.0	-	-	-	-	-	
86.5 32.4	-	8.3	-	18.2	-	-	0.0	-	-	-	-	-	
88.4 29.7	5.2	-	-	0.0	-	0.0	-	-	-	-	-	-	
88.5 29.3	2.6	-	-	2.5	-	0.0	-	-	-	-	-	-	
88.6 30.2	51.0	-	-	144.5	-	0.0	-	-	-	-	-	-	
88.7 30.6	126.0	-	-	2229.5	-	0.0	-	-	-	-	-	-	
88.8 31.5	64.5	-	-	361.2	-	44.8	-	-	-	-	-	-	
91.0 26.6	6.0	-	-	0.0	-	0.0	-	-	-	-	-	-	
91.0 26.8	0.0	-	-	2.3	-	0.0	-	-	-	-	-	-	
91.0 27.0	98.1	-	-	0.0	-	0.0	-	-	-	-	-	-	
91.1 27.2	350.7	-	-	13.5	-	0.0	-	-	-	-	-	-	
91.1 27.3	467.5	-	-	237.0	-	0.0	-	-	-	-	-	-	
<i>Argentina sialis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	0.0	-	-	3.0	-	0.0	-	-	-	-	-	-	
91.1 27.3	0.0	-	-	2.4	-	0.0	-	-	-	-	-	-	

Table 9. (cont.)

<i>BathyLAGUS stilbius</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	0.0	-	-	6.0	-	0.0	-	-	-	-	-	-	
<i>Lipolagus ochotensis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.3 33.4	-	0.0	-	42.1	-	-	2.1	-	-	-	-	-	
<i>Cyclothona signata</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.8 31.5	2.5	-	-	0.0	-	0.0	-	-	-	-	-	-	
<i>Diaphus spp.</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.5 32.3	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-	
<i>Nannobrachium spp.</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.4 32.7	-	1.9	-	0.0	-	-	0.0	-	-	-	-	-	
88.6 30.2	2.0	-	-	0.0	-	0.0	-	-	-	-	-	-	
<i>Nannobrachium ritteri</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.3 33.4	-	2.3	-	0.0	-	-	0.0	-	-	-	-	-	
<i>Stenobrachius leucopsarus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.2 38.8	-	0.8	-	0.0	-	-	0.0	-	-	-	-	-	
84.3 38.9	-	0.0	-	9.3	-	-	0.0	-	-	-	-	-	
84.3 39.1	-	4.1	-	53.6	-	-	0.0	-	-	-	-	-	
84.3 39.4	-	0.0	-	33.2	-	-	0.0	-	-	-	-	-	
84.3 39.6	-	0.0	-	10.8	-	-	0.0	-	-	-	-	-	
86.3 33.4	-	0.0	-	157.8	-	-	0.0	-	-	-	-	-	
88.6 30.2	6.1	-	-	0.0	-	0.0	-	-	-	-	-	-	
88.7 30.6	42.9	-	-	22.1	-	0.0	-	-	-	-	-	-	
88.8 31.5	0.0	-	-	9.0	-	0.0	-	-	-	-	-	-	
91.1 27.2	17.3	-	-	0.0	-	0.0	-	-	-	-	-	-	
91.1 27.3	16.9	-	-	0.0	-	2.5	-	-	-	-	-	-	

Table 9. (cont.)

<i>Triphoturus mexicanus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	-	0.0	-	0.0	-	-	1.5	-	-	-	-	-
<i>Merluccius productus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.4	-	0.0	-	22.1	-	-	0.0	-	-	-	-	-
84.3 39.6	-	0.0	-	162.5	-	-	0.0	-	-	-	-	-
86.3 33.4	-	0.0	-	42.1	-	-	0.0	-	-	-	-	-
88.6 30.2	2.0	-	-	0.0	-	0.0	-	-	-	-	-	-
88.7 30.6	2.7	-	-	2.5	-	0.0	-	-	-	-	-	-
88.8 31.5	0.0	-	-	27.1	-	0.0	-	-	-	-	-	-
91.1 27.3	0.0	-	-	4.7	-	0.0	-	-	-	-	-	-
<i>Cataetyx rubrirostris</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.6	-	0.0	-	10.8	-	-	0.0	-	-	-	-	-
86.3 33.4	-	0.0	-	21.0	-	-	0.0	-	-	-	-	-
88.8 31.5	0.0	-	-	15.1	-	0.0	-	-	-	-	-	-
<i>Atherinopsis californiensis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.5 32.3	-	1.9	-	0.0	-	-	0.0	-	-	-	-	-
88.4 29.7	0.0	-	-	1.7	-	0.0	-	-	-	-	-	-
91.0 27.0	2.2	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Leuresthes tenuis</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.2 38.8	-	0.0	-	1.6	-	-	0.0	-	-	-	-	-
<i>Sebastes spp.</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.4	-	1.7	-	22.1	-	-	0.0	-	-	-	-	-
84.3 39.6	-	0.0	-	21.7	-	-	3.9	-	-	-	-	-
86.3 33.4	-	6.9	-	126.2	-	-	0.0	-	-	-	-	-
86.4 32.7	-	0.0	-	12.6	-	-	0.0	-	-	-	-	-
88.7 30.6	18.8	-	-	2.5	-	0.0	-	-	-	-	-	-
88.8 31.5	193.4	-	-	69.2	-	0.0	-	-	-	-	-	-
91.1 27.2	42.0	-	-	0.0	-	0.0	-	-	-	-	-	-
91.1 27.3	282.0	-	-	0.0	-	0.0	-	-	-	-	-	-

Table 9. (cont.)

<i>Sebastes jordani</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.1	-	0.0	-	10.7	-	-	0.0	-	-	-	-	-	
86.3 33.4	-	9.2	-	10.5	-	-	0.0	-	-	-	-	-	
88.7 30.6	2.7	-	-	0.0	-	0.0	-	-	-	-	-	-	
88.8 31.5	49.6	-	-	0.0	-	0.0	-	-	-	-	-	-	
<i>Sebastes levis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.4	-	0.0	-	11.1	-	-	0.0	-	-	-	-	-	
88.8 31.5	0.0	-	-	6.0	-	0.0	-	-	-	-	-	-	
<i>Zaniolepis latipinnis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.3 33.4	-	2.3	-	0.0	-	-	0.0	-	-	-	-	-	
<i>Icelinus quadriseriatus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.3 33.4	-	0.0	-	0.0	-	-	2.1	-	-	-	-	-	
91.1 27.2	0.0	-	-	0.0	-	9.9	-	-	-	-	-	-	
91.1 27.3	4.8	-	-	4.7	-	0.0	-	-	-	-	-	-	
<i>Leptocottus armatus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.5 32.3	-	1.9	-	0.0	-	-	0.0	-	-	-	-	-	
<i>Oligocottus maculosus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.1 27.3	2.4	-	-	0.0	-	0.0	-	-	-	-	-	-	
<i>Scorpaenichthys marmoratus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
86.4 32.7	-	1.9	-	0.0	-	-	0.0	-	-	-	-	-	
<i>Odontopyxis trispinosa</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.1 27.2	0.0	-	-	0.0	-	3.3	-	-	-	-	-	-	
<i>Xeneretmus latifrons</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.1 27.3	0.0	-	-	2.4	-	5.0	-	-	-	-	-	-	

Table 9. (cont.)

Station	Jan.	Feb.	Mar.	Apr.	<i>Cheilotrema saturnum</i>			Aug.	Sep.	Oct.	Nov.	Dec.
					May	June	July					
86.5 32.1	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-
<i>Genyonemus lineatus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 38.9	-	1.4	-	0.0	-	-	0.0	-	-	-	-	-
84.3 39.4	-	3.4	-	0.0	-	-	0.0	-	-	-	-	-
84.3 39.6	-	7.5	-	0.0	-	-	0.0	-	-	-	-	-
86.3 33.4	-	2.3	-	42.1	-	-	0.0	-	-	-	-	-
86.4 32.7	-	0.0	-	12.6	-	-	0.0	-	-	-	-	-
86.5 32.3	-	1.9	-	0.0	-	-	0.0	-	-	-	-	-
86.5 32.4	-	4.2	-	2.3	-	-	0.0	-	-	-	-	-
88.4 29.7	2.6	-	-	0.0	-	0.0	-	-	-	-	-	-
88.5 29.3	7.9	-	-	22.1	-	0.0	-	-	-	-	-	-
88.6 30.2	32.6	-	-	130.1	-	0.0	-	-	-	-	-	-
88.7 30.6	88.4	-	-	14.7	-	0.0	-	-	-	-	-	-
88.8 31.5	0.0	-	-	12.0	-	0.0	-	-	-	-	-	-
91.0 26.6	4.0	-	-	0.0	-	0.0	-	-	-	-	-	-
91.0 26.8	5.2	-	-	0.0	-	0.0	-	-	-	-	-	-
91.0 27.0	24.5	-	-	0.0	-	0.0	-	-	-	-	-	-
91.1 27.2	17.3	-	-	51.3	-	0.0	-	-	-	-	-	-
91.1 27.3	21.7	-	-	4.7	-	0.0	-	-	-	-	-	-
<i>Gibbonsia</i> spp.												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.0 26.8	2.6	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Heterostichus rostratus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.0 26.8	2.6	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Hypsoblennius</i> spp.												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.5 29.3	0.0	-	-	0.0	-	3.0	-	-	-	-	-	-
88.6 30.2	2.0	-	-	0.0	-	0.0	-	-	-	-	-	-
91.0 26.6	0.0	-	-	0.0	-	1.1	-	-	-	-	-	-

Table 9. (cont.)

Station		Jan.	Feb.	Mar.	Apr.	<i>Hypsoblennius gilberti</i>			Aug.	Sep.	Oct.	Nov.	Dec.
						May	June	July					
88.7	30.6	0.0	-	-	0.0	-	4.0	-	-	-	-	-	-
<i>Hypsoblennius jenkinsi</i>													
Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.4	32.7	-	0.0	-	0.0	-	-	17.1	-	-	-	-	-
86.5	32.3	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-
86.5	32.4	-	0.0	-	0.0	-	-	16.0	-	-	-	-	-
88.6	30.2	0.0	-	-	0.0	-	2.6	-	-	-	-	-	-
91.1	27.2	0.0	-	-	0.0	-	36.2	-	-	-	-	-	-
91.1	27.3	0.0	-	-	2.4	-	0.0	-	-	-	-	-	-
<i>Ilypnus gilberti</i>													
Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.4	29.7	0.0	-	-	1.7	-	0.0	-	-	-	-	-	-
88.5	29.3	0.0	-	-	2.5	-	0.0	-	-	-	-	-	-
<i>Lepidogobius lepidus</i>													
Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.5	32.3	-	38.6	-	0.0	-	-	0.0	-	-	-	-	-
88.5	29.3	13.2	-	-	0.0	-	0.0	-	-	-	-	-	-
88.6	30.2	0.0	-	-	2.9	-	0.0	-	-	-	-	-	-
91.0	26.8	2.6	-	-	0.0	-	0.0	-	-	-	-	-	-
91.1	27.2	22.2	-	-	0.0	-	0.0	-	-	-	-	-	-
91.1	27.3	60.3	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Rhinogobiops nicholsii</i>													
Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.6	30.2	0.0	-	-	2.9	-	0.0	-	-	-	-	-	-
88.7	30.6	0.0	-	-	2.5	-	0.0	-	-	-	-	-	-
<i>Typhlogobius californiensis</i>													
Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
91.0	26.6	0.0	-	-	2.0	-	0.0	-	-	-	-	-	-
91.0	27.0	2.2	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Scomber japonicus</i>													
Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.8	31.5	0.0	-	-	0.0	-	5.6	-	-	-	-	-	-

Table 9. (cont.)

<i>Peprilus simillimus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.8 31.5	0.0	-	-	0.0	-	11.2	-	-	-	-	-	-
<i>Citharichthys spp.</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.7 30.6	8.0	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Citharichthys sordidus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.8 31.5	2.5	-	-	3.0	-	0.0	-	-	-	-	-	-
<i>Citharichthys stigmatus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
84.3 39.6	-	1.9	-	0.0	-	-	0.0	-	-	-	-	-
86.3 33.4	-	0.0	-	21.0	-	-	0.0	-	-	-	-	-
88.7 30.6	2.7	-	-	0.0	-	0.0	-	-	-	-	-	-
91.1 27.2	4.9	-	-	0.0	-	0.0	-	-	-	-	-	-
<i>Paralichthys californicus</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.4 32.7	-	3.8	-	12.6	-	-	1.9	-	-	-	-	-
86.5 32.3	-	0.0	-	0.0	-	-	1.7	-	-	-	-	-
86.5 32.4	-	2.1	-	0.0	-	-	1.8	-	-	-	-	-
88.4 29.7	2.6	-	-	0.0	-	0.0	-	-	-	-	-	-
88.5 29.3	2.6	-	-	0.0	-	0.0	-	-	-	-	-	-
88.6 30.2	34.7	-	-	0.0	-	0.0	-	-	-	-	-	-
88.7 30.6	8.0	-	-	0.0	-	0.0	-	-	-	-	-	-
91.0 27.0	11.2	-	-	0.0	-	0.0	-	-	-	-	-	-
91.1 27.2	4.9	-	-	2.7	-	0.0	-	-	-	-	-	-
91.1 27.3	19.3	-	-	4.7	-	0.0	-	-	-	-	-	-
<i>Hypsopsetta guttulata</i>												
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
88.5 29.3	2.6	-	-	0.0	-	0.0	-	-	-	-	-	-
91.0 27.0	2.2	-	-	0.0	-	0.0	-	-	-	-	-	-
91.1 27.3	2.4	-	-	0.0	-	0.0	-	-	-	-	-	-

Table 9. (cont.)

<i>Lyopsetta exilis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.6	-	0.0	-	75.8	-	-	0.0	-	-	-	-	-	
86.3 33.4	-	0.0	-	115.7	-	-	0.0	-	-	-	-	-	
86.4 32.7	-	0.0	-	12.6	-	-	0.0	-	-	-	-	-	
88.7 30.6	0.0	-	-	2.5	-	0.0	-	-	-	-	-	-	
88.8 31.5	0.0	-	-	6.0	-	0.0	-	-	-	-	-	-	
91.1 27.3	0.0	-	-	4.7	-	0.0	-	-	-	-	-	-	
<i>Parophrys vetulus</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
84.3 39.4	-	0.0	-	11.1	-	-	0.0	-	-	-	-	-	
84.3 39.6	-	0.0	-	140.8	-	-	3.9	-	-	-	-	-	
86.3 33.4	-	0.0	-	115.7	-	-	0.0	-	-	-	-	-	
88.7 30.6	0.0	-	-	2.5	-	0.0	-	-	-	-	-	-	
<i>Pleuronichthys ritteri</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.0 27.0	0.0	-	-	2.8	-	0.0	-	-	-	-	-	-	
91.1 27.3	0.0	-	-	2.4	-	0.0	-	-	-	-	-	-	
<i>Pleuronichthys verticalis</i>													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
88.6 30.2	2.0	-	-	2.9	-	0.0	-	-	-	-	-	-	
88.7 30.6	0.0	-	-	2.5	-	0.0	-	-	-	-	-	-	
88.8 31.5	0.0	-	-	6.0	-	0.0	-	-	-	-	-	-	
91.1 27.2	0.0	-	-	0.0	-	6.6	-	-	-	-	-	-	
91.1 27.3	0.0	-	-	2.4	-	0.0	-	-	-	-	-	-	
Disintegrated fish larvae													
Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
91.0 27.0	2.2	-	-	0.0	-	0.0	-	-	-	-	-	-	
91.1 27.2	2.5	-	-	0.0	-	0.0	-	-	-	-	-	-	

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